

First Look: Apple's Supercool, Superthin iBooks



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JULY 2001 NO. 59

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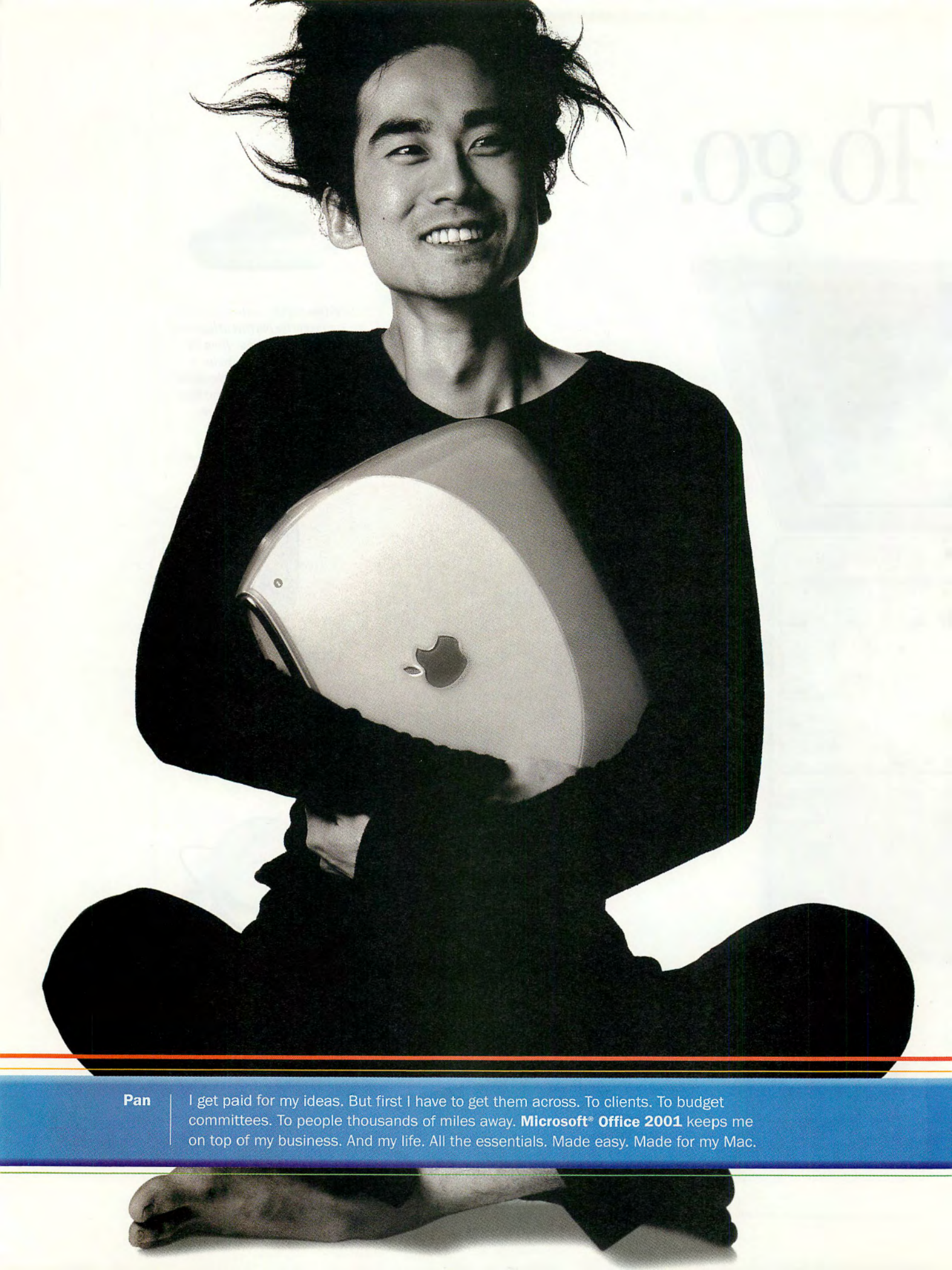


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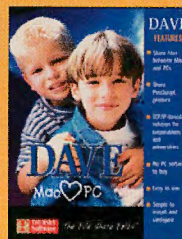
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highlights

22 Nitro-Burning Funny Macs

The new G4s and Titanium PowerBooks are for wusses. At least, that's what we who don't own them tell ourselves. Real Macs are those their owners have salvaged and put together in some wildly weird way—we're talking a G3 stuffed into an LC 475 pizza box and detailed with flames or a gun-totin' camouflage 9600. **by the MacAddict Staff**



34 Vanity Mac

If you've been feeling down and out lately, it's time for a little esteem boost—but rather than spend \$80 an hour on a therapist, let the Mac treat you. With a bit of tinkering and some cool



shareware, you can turn your Mac into an ode to yourself. By the end of this exercise, you'll feel as coddled and well loved as a brand-new puppy. **by Nikki Echler McDonald**

Pepper starts her campaign to bring back the sock puppet.

41 The Handspring Wilderness Handbook

When you think of survival in the wilderness, you probably think of food, water, blankets, and a compass. Well, sure, *technically* that stuff's essential. It also doesn't hurt to have a Handspring and a bunch of modules tucked away in your coat pocket. **by Jack Miller**

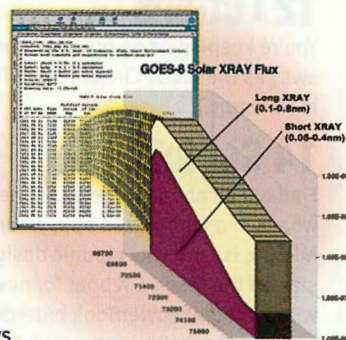


A giant leap forward in human-beaver relations.

how to

68 Get the Web into Excel

Oh, sure, you could just look up some item on the Web, then cut and paste it into Excel, or even retype it—but if *that* satisfied you, then you probably wouldn't be reading this magazine. Now you can get information from the Web directly into Excel so you always have the latest data at your fingertips. **by Maria Langer**



Whoa! These 3D glasses really do work!

70 Make Your Own iDVD Themes

If you've got one of those supercool SuperDrives that can burn DVD-R videos, you're probably getting mighty tired of iDVD's stock themes. Here's how to make some of your own. **by Ian Sammis**



The real Classic environment.

74 Use Mac OS X as an Anonymous FTP Server

Whether it's artwork, software, or just long polemics about the price of eggs, sometimes you have files you don't want to keep to yourself. Here's how to turn your Mac OS X box into a full-fledged anonymous FTP server. **by Buz Zoller**



Warning: Eating those round, blue thingies may cause physiological harm.



Now show a little skin.
Cover photo by Arnold Tiosejo.

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every month

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Creating FrankenMacs can be fun!

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You're keeping us on our toes from as far away as the Arctic Circle. *Takk!* (That's "thanks" in Icelandic.)

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Find out all about Apple's slim new iBook, what's in a Carbonized app, where in the world MPEG-4 is, and why graphic designers should stay off the Mac OS X boat for now. Get help with impotent PowerBook batteries and iMacs in the outback. Plus, your own personal iMAX experience, free Web-based calendars, and much more.

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Ready 2, take 2, and action! We give Apple its close-up with Final Cut Pro 2.0 and the new hippy, trippy iMac Special Edition. We also tune in to the Rio 800, Sonicfire Pro, Sony's Digital Relay, and Formac's FireWire CD-RW. Plus, there's much procrastinating to be had with Escape from Monkey Island, Heroes III Complete, Monopoly Casino, GameRoom, and more.

64 Powerplay

Presto takes on the Myst series, with a lot of acting assistance from Cyan. glTron makes its way to Mac OS X, and we dig through the Game of the Year edition of Unreal Tournament to see what makes it tick.

80 Ask Us

Lots of Mac OS X-related questions this month (go figure), along with the latest rundown on Video CDs. We also give you a few Mac cleanliness tips.

104 Shut Down

We've managed to isolate all the fear, uncertainty, and doubt (FUD) surrounding Mac OS X into a single page of the magazine!

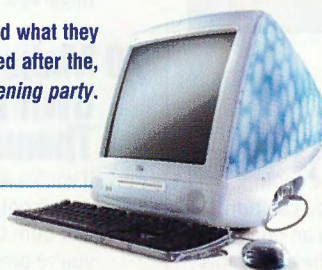


Ian's shock at the moment of impact was woefully apparent.

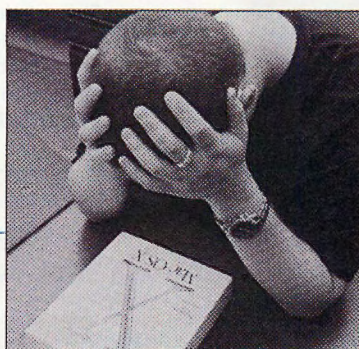


It's Apple's version of the *White Album*....

...and what they created after the, um, listening party.



Greetings from Myst III... wish you were here!



Where have you *been* all my life?!

MacAddict

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Bye Niko, hi Niko! Normal month?
Maybe next time. Now get on your
knees and dance!



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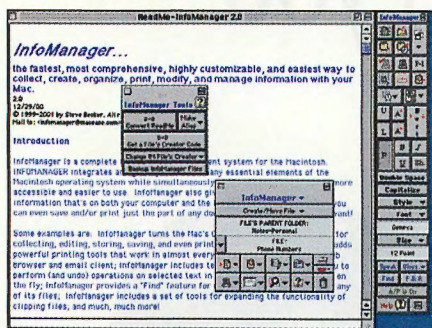


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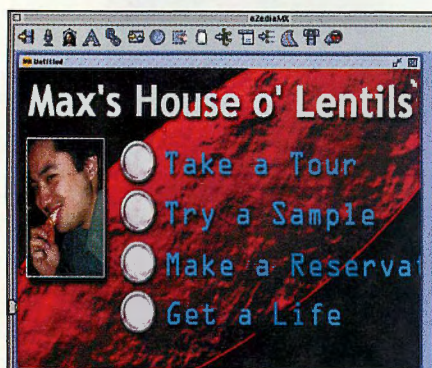


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eZedia MX Demo

Need to create an interactive presentation with buttons, movies, text, and graphics? eZedia may be the answer. This intuitive, cross-platform multimedia tool is megadollars cheaper than Director, but it's powerful and easy to use. As a special offer, the company is giving *MacAddict* readers—that means you—a great deal on the product. Check out the demo on The Disc and take advantage of this exclusive offer!



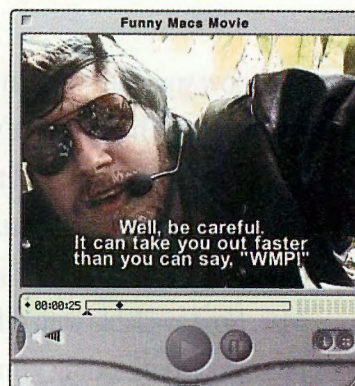
Tux Racer Beta

In the style of *Star Wars Pod Racer*, Tux Racer is a racing game in which you play...a penguin. But you're not just an average Joe or Jill penguin—you're going for the gold. Assume the belly-down racing position and navigate through icy terrain while collecting herring! Trust us, it's more fun than words can describe. This Mac OS X port of an OpenGL Linux game is truly a blast.



glTron Freeware

In the eighties, *Tron* pioneered computer-generated imagery in movies, and arcade games influenced by this film sprouted up everywhere. One of the most famous and exciting scenes was the Light Cycle game. Now you can relive the thrill by piloting your own Light Cycle, dodging walls and beams to stay alive. glTron's look and feel stays faithful to the movie, and no other Tron game has come this close. Best of all, it's free and it's available in both PPC and Mac OS X versions.



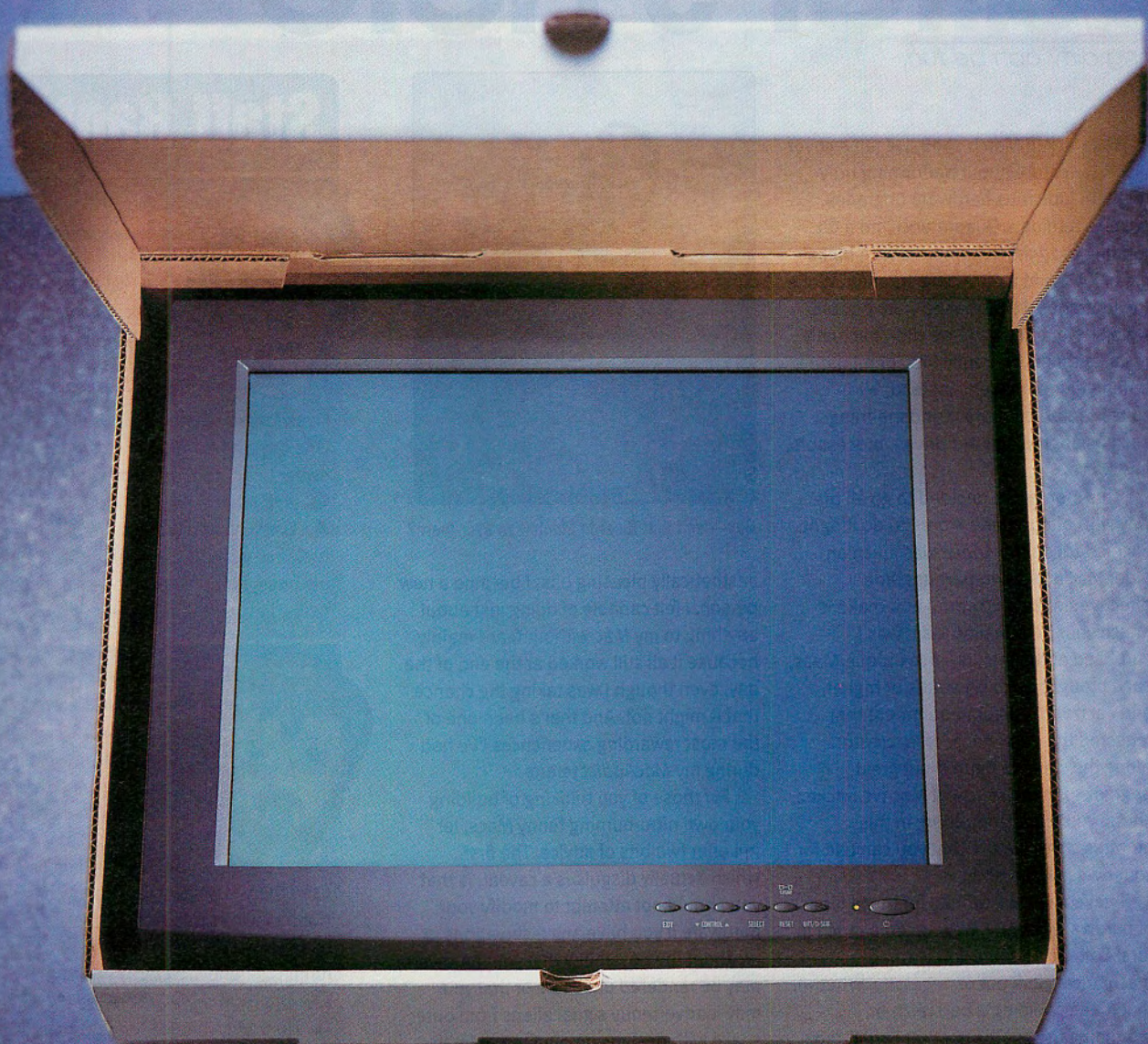
In a bold effort to improve upon our already feature-film quality, professional staff videos, we took a few hours from our busy editorial schedules to bring you some movies using the Macs from our "Nitro-burning Funny Macs" article (this issue, p22). We put more time than usual into making this month's staff video, and we wanted to show you some behind-the-scenes footage so you could see how we created them. Just a word of caution: Don't tug your PowerBook behind a bicycle. We're trained professionals.

Bonus!

Every month we'll have bonus materials on The Disc for you to check out.

This Month:

This month: July *Nitrozac* comics and more Mac OS X icons, plus the exclusive "Best of Mac Show Live," with interview highlights from www.macshowlive.com.



WHO ORDERED THE 18-INCH?

The LaCie photon18blue™ display. Thin enough to hang on a wall and versatile enough to orient in either landscape or portrait position, the constant backlight of the 18" LCD screen combines with a removable color-enhancing hood to make for thin, brilliant color no matter how or where it's displayed.



LACIE

Made for ideas.

editor's note

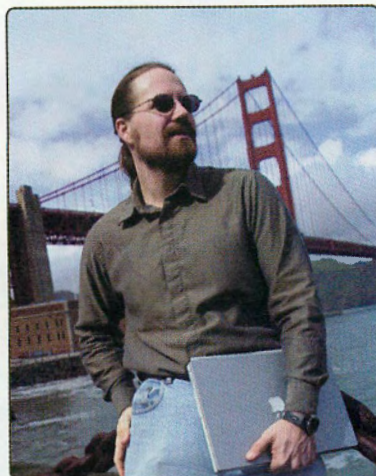
Getting dirty can be fun.

Back in March 1998, we ran a cover feature about performing truly ludicrous hardware upgrades, such as turning a Quadra 800 into a G3 running at 275MHz, complete with half a gig of RAM and a retracting antenna. While the upgrades we proposed were doable, we only went halfway—we didn't actually install airbags, hydraulic lifts, or miniature butane flamethrowers. Instead, we concentrated on more mundane things, such as upgrading hard drives, processors, and RAM.

This month, we decided to go all the way with our upgrade story—to do it right. Each editor at *MacAddict* was given an older Mac and a two-part upgrade directive: Make it powerful and make it match your personality. Man, was I surprised at the results—five unique Macs, each brought up to G3 status or higher, and each with custom equipment that reflected the personality of its creator. Along the way, we figured out great upgrades for each class of Mac we hacked. I hope you'll find something in this month's cover feature that you can use for your own Macintosh.

I have a special affinity for these types of hardware hacks. I grew up on a ranch in rural Colorado, where you learned mechanical work out of necessity. Whether that meant welding a bad hitch or rebuilding the engine in a '68 Ford F-150 pickup truck, being handy with a wrench, torch, and some bailing wire was essential to keeping things up and running. This also meant we were free to try new and interesting modifications to our equipment so it would work faster or better, or so it would do something it was never intended to do. Although our modifications didn't *always* work out the way we'd intended (the less said about the VW Bug with the lawnmower engine, the better), most of the time they served their purpose.

That spirit of tinkering has served me well in the Macintosh arena. Instead of boring out the cylinders to see if I can get a little more power out of a 327 engine, now I spend my time with motherboard jumpers and upgrade cards. The end result is the same, though—a faster system. And once I broke through my fear of making *any* modifications to my Mac's actual case by painting it or removing certain less than



Hey—isn't that Ricardo Montalban over there?

aesthetically pleasing bits, I became a new person. I felt capable of doing just about anything to my Mac without fear—mainly because it all still worked at the end of the day, even though I was taking the chance that it might not. And that's been one of the most rewarding experiences I've had during my *MacAddict* tenure.

For those of you thinking of building your own nitro-burning funny Macs, let me offer two bits of advice. The first, which actually disguises a caveat, is that you should not attempt to modify your hardware if you have any reservations *at all* about the possibility that your hardware may be rendered unusable or that you may inadvertently signal aliens from outer space with designs on our farm animals. Despite the boring looks of certain PC cases (and older Mac cases, for that matter), computers are the shape they are for many good reasons, including radio shielding, cooling, and shock absorbency. When you modify your Mac's case by painting it, cutting it, or moving your motherboard, you're changing all of these variables—and you run the risk of damaging your hardware. The second bit of advice is to go for it. It's a lot of fun to build a custom computer case, especially one that contains a super-powered Macintosh that you upgraded yourself. Even if you decide you'd rather not modify your case design, you can still pump up your RAM, hard drive, processor, and expansion options to amazing new heights.

Finally, if you build your own funny Mac, please send in photos of your beastie to letters@macaddict.com. We'd love to see what you come up with.—David Reynolds

Staff Rants



Leslie Brown

Associate Head Crash Director

Q. What's the skankiest unintended use to which you've put a piece of hardware?

A. At a former workplace, I was forced to use an old Dell to do design. One day, the hard drive mysteriously fried. I swear I had nothing to do with it!

Q. And were there any injuries?

A. Every bizarre Windows error message took away a little piece of my soul, but having my boss admit he should've bought a Mac helped repair the damage.



Ian Sammis

Senior Crash Test Dummy

Q. What's the skankiest unintended use to which you've put a piece of hardware?

A. Well, at one point I used the passenger-side window of a parked Honda Civic as a personal deceleration device. (In other words, I hit it with my head while running—rather quickly).

Q. And were there any injuries?

A. No bodily injuries—safety glass is great stuff. It's also very pretty when it's spreading out in a rough hemisphere centered around your head. My wallet sustained the most serious injury—I didn't have an insurance policy to cover that sort of thing.



Jenifer Morgan

Walk Softly Editor

Q. What's the skankiest unintended use to which you've put a piece of hardware?

A. On a dare, I hit a friend of mine over the head (hard) with a squeal stick toy (the name of which is pretty skanky, if you ask me) when I was eight.

Q. And were there any injuries?

A. I broke the toy, made her cry, and was left behind in the car while everyone else got to go into the dinosaur museum.



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ANIMAL UPGRADE

We purchased this Apple IIe in 1983 to collect data transmitted from special electronic collars fitted on sheep. Although the experiment ended long ago and the Apple IIe was covered in plastic and stored in a barn, scientists found new use for data never uploaded from the old floppies. We were all delighted and amazed that in less than an hour, thanks to a Keyspan serial-to-USB adapter, we were dumping data from the Apple IIe onto the Titanium G4 also seen in the photo.—*Randy Bradley, computer specialist, U.S. Meat Animal Research Center*



Ah, the resemblance. You have your mother's key caps.

THE POWER OF PLAIN TALK

It worked! It worked! 88 mph! I'm very excited and happy, too, that Ian's little trick with the PlainTalk microphone worked ("Record Your Mac's Voice," Apr/01, p70). I modified the microphone a tiny bit so that it used one of the 1/4-inch jacks (the big ones). Now I can plug my electric guitar straight into my Mac! It looks great. Thanks, Ian.

—*Ryan Powers*

FLY THE MAC-FRIENDLY SKIES

Just because I'm an instrument-rated private pilot with 500-plus hours flying time doesn't mean I've got it all figured out. Landings are still one of the biggest challenges for any pilot, so it was great to see such an in-depth explanation in laymen's terms of this dark science. I have to believe Ms. Morgan is either

a pilot and/or an instructor herself—her grasp of things aeronautic was inspiring for pilots and gamers alike. Now, if I could only get GPS info on an on-board Titanium G4, my two favorite worlds would collide!—*Tom M.*
Yes, you're right. *Jenifer Morgan is a licensed pilot.*—Ed.

MAKES SENSE

Regarding his March 21, 2001, Web article, "Should I get Mac OS X?" (www.macaddict.com/osx), Sammis may want to add another group to the list of people who should install OS X as soon as they can. This group is new users. I intend to buy my first Apple computer this year, and I'd rather learn the latest operating system first before spending time on older operating systems.

—*Ralph W. Tack*

THE FIRST-ANNIVERSARY GIFT IS PAPER, ANYWAY

I was happy to see that Mac OS X shipped out on the same day as my girlfriend's and my one-year anniversary. I would have gotten her the OS as an anniversary present, but she's a PC user. Don't worry, I'm sure I can convince her to get a Mac by next year.

—*Chris*

MACADDICT ON VACATION

I had the pleasure and good fortune of picking up *MacAddict* a few months ago while I was on a trip to Aruba. While waiting to board the plane back to the states, I entered a tiny broom closet of a store in the Aruban airport. The only reading material offered was a few *Penthouse* issues dating back to the mid-nineties, a PC gaming magazine from when *Space Invaders* was still hot, and the heavenly *MacAddict*. I had

never heard of your magazine before then and had the pleasure of paying about \$18 U.S. for it. I fell in love with it! My only beef is your using REALbasic for The Disc's interface. What are you guys thinking? It's all about Macromedia Director!—*Dennis Gadeikis*

CRUEL AND UNUSUAL ANIMAL TESTING

This Web site (www.learnlink.emory.edu/peep/index.html), which chronicles scientific experiments performed on Peeps, struck me as an interesting fusion of your Peeps fetish and your PC-destruction fetish. This is what *really* goes on at those institutions of higher learning. I particularly liked the Low-Pressure Peeps experiment, which subjected the candy to a vacuum. Keep up the spectacular work.—*E.K. Beale*



Mouth-to-mouth resuscitation failed to bring back this poor Peep, but it was still yummy.

GLAD TO HELP OUT

I always had the inkling that *MacAddict* was the coolest Mac publication around (come to think of it, it's also the only mainstream Mac magazine that regularly contains useful articles), but I never realized just *how* cool until I saw *As the Apple Turns* broadcasting from the MacAddict.com Web site. Can I just send a big, whopping thank you to the team at *MacAddict* for helping all of us

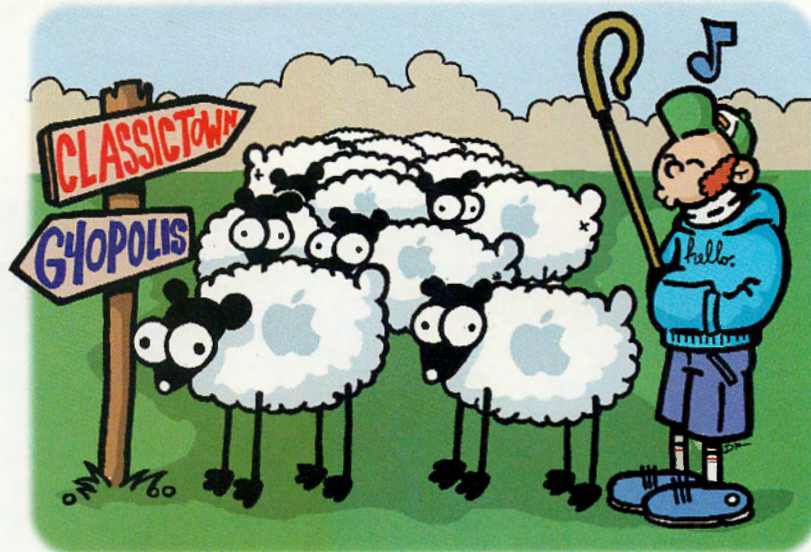


ILLUSTRATION BY DAVID ROSS

Hey, guys—a lemming clued me in on this great cliffside trail!



Surviving the Broadband Survival Guide

Once again, we wrote a wildly controversial article. This time it was "The Survival Guide to Broadband" (May/01, p26), where we took the plunge and declared DSL the winner. Some of you applauded our decision, some were none too thrilled, and others offered their own spin on the issue.

DELIGHTED SL

Kudos for the well-written, insightful article about cable versus DSL. You validated my choice of DSL—thank you!—R.G. Rhoades

THE RURAL CONNECTION

In the "O Broadband, Where Art Thou?" section (May/01, p34), *MacAddict* magazine states: "For those of you who live in rural Montana—well, there's always satellite, right?" I do live in rural Montana and have been using SDSL (single-line DSL) for over two years. In fact, I run a 100 percent Mac OS (Mac OS X Server) software and Apple hardware company for Web development and hosting, which uses SDSL (running at 384 Kbps for now) to serve Web sites. We have the service level of a T1 for a fraction of the cost. Just wanted to let you know the FCC map is probably grossly inaccurate. Ain't Montana cool?—Parker

TRIBAL SQUABBLES

Your "Tribal Challenges" (p32) were off-balance. It seems as if you were comparing the best possible DSL service against the worst possible cable service. I have about a half a dozen friends using DSL here in Phoenix, and an equal number using cable. Only one of the DSL users reports speeds as fast

as the cable users get, all of the DSL users have experienced intermittent service outages, and they all pay more. I don't think a sample size of one person is a very useful comparison for someone trying to decide which type of connection to use.

—Michael Gibbs

In researching this article, we ended up comparing a ton of the better DSL services to one of the worst cable modem providers, but that was the selection of providers available to us at the time of our testing. Although we did declare a winner, the point of the article was not to tell you to get DSL, but rather to provide some guidelines for comparing your available options. We apologize if we didn't make that clear throughout the article.—Ed.

THE SIMPLE SOLUTION

Regarding Dave Hamilton's segment on sharing an Internet connection among several Macintosh computers ("Share Your Broadband Connection," May/01, p37), we tried software like Surf Doubler and hardware like Friendly Share, but neither option worked very well. We finally called AT&T, and for \$5 per month per computer, the company issued each workstation a unique IP address.—Craig McDowall
That works too.—Ed.

GAMERS UNITE

Wait a minute. You say you only have one Mac to host games right now, and Unreal Tournament gets priority. What kind of Mac do you need? How about a call for volunteers for such a system? You've got this community, man, use it. Beg, I know of two Power Towers in my inner Mac circle that no one's using (granted, I can't exactly pass these to you without the owners' permission), so give us specs! Do you need a 733MHz G4 to host these games, or will an older system donated by some Mac user be good enough? We're here for you.—Ruprecht Jones

Apple Turns fans in our time of crisis? You guys really rock!—Answergeek
When the popular *As the Apple Turns* (www.appleturns.com) experienced some DSL hell, we agreed to host the site temporarily. It's back up now.—Ed.

UNFORTUNATELY, IT IS

What happened to *digitalFOTO*? I looked for the Web site and found a notice saying that the magazine has "closed its doors." Please say it isn't so!—Katie Bretsch
Take heart. *Kris Fong*, *digitalFOTO*'s features editor, is now our take-no-prisoners reviews editor.—Ed.

TOO BAD YOU CAN'T CLEAN OUT YOUR GARAGE THIS EASILY.

New 4.0
Version



Spring Cleaning

Out with the old, in with the new. Spring Cleaning™ 4.0 with iClean™ safely removes old software and wipes away cookies, cache and other Internet tracks. Reclaim disk space plus protect yourself from prying eyes. Regain peak performance with the #1 uninstaller for Macintosh!



Copyright 2001 Aladdin Systems, Inc.

Check out Spring Cleaning 4.0 at
Macworld Expo NY, booth 1319.

get info

Spice up your life.

My Name Is Book, iBook

Faster Processors, Better Displays, and New Optical Drives Do a Consumer Portable Good

If portability, burnability, and masculinity kept you from buying an iBook that resembled a makeup case, wait no longer. Apple recently unveiled faster, lighter iBooks with greater display resolution and CD-RW and/or DVD-ROM drives. Swaddled in understated elegance (White and Silver), the iBook finally looks more like the serious machine it is, and less like a powder compact.

Steve Jobs unveiled the new machine at a special press briefing at Apple's Cupertino, California, headquarters. After reminding event attendees of the iBook's success (more than 700,000 sold since the model's inception in September 1999 as of press time), Jobs spoke for approximately 45 minutes about the new model. "It's the perfect center of your digital lifestyle," he said before reciting Apple's marketing slogan for the machine: "Your life. To go."

It's certainly built to go: The new iBook is only slightly larger than an 8 1/2-by-11-inch tablet of paper. It weighs only 4.9 pounds and is a mere 1.35 inches thick. With its new magnesium frame, polycarbonate plastic, and rubber-mounted 10GB drive, it can survive a more rough-and-tumble lifestyle than the last set of iBooks—and it survives with a lot more finesse. In line with the Titanium G4 PowerBook, the form factor is the ultimate in simplicity, and so's the name—Apple design guru Jonathan Ive calls the color scheme simply "White and Silver." Fitted with a 500MHz G3 processor, this book goes faster than ever. And when your life doesn't come with a power outlet, you can rely on the iBook's 5-hour battery life.

Even more impressively, with this model Apple shrewdly addressed two major drawbacks of previous iBooks: display



PHOTOGRAPH COURTESY OF APPLE COMPUTER

Complete with CD-RW, DVD-ROM, and James Bond good looks, all this machine needs is a thermonuclear detonator and a BMW.

resolution and drive options. While the screen size on the new iBooks remains unchanged from that of older iBook models (12.1 inches diagonal), the maximum resolution is now 1,024 by 768 pixels, up from 800 by 600. Plus, the new iBook comes with four different optical-drive options at four price points. You can choose a CD-ROM (\$1,299), DVD-ROM (\$1,499), CD-RW (\$1,599), or the droolworthy combo CD-RW and DVD-ROM (\$1,799).

Once you're done marveling at the impressive CD-burning, DVD-viewing options, your practical side will appreciate the increased memory expansion capabilities. This iBook's memory is expandable up to 640MB (for all but the base model), instead of the 320MB that previous iBooks offered. It also has an extra USB port.

While some things change, others remain the same. The iBook still contains a 10GB hard drive, 8MB of VRAM, and an ATI Rage Mobility 128 graphics accelerator. So while the iBook comes bundled with iMovie2 (and iTunes), for hard-core video editing on the go, you'll probably still need a Titanium G4 PowerBook.

The new iBook is tops—at a lowered base price to boot. While it's designed primarily for teachers, students, and consumers, with its slick design, this system might weasel its way into professional milieus as well.—NR

Hey Four-i's

Apple Makes iBooks Available in Four Pricing and Feature Configurations

\$1,299	\$1,499	\$1,599	\$1,799
G3/500	G3/500	G3/500	G3/500
64MB	128MB	128MB	128MB
10GB Ultra ATA	10GB Ultra ATA	10GB Ultra ATA	10GB Ultra ATA
24X CD-ROM	8X DVD-ROM	8X4X24X CD-RW	DVD-ROM/CD-RW combo
2 USB ports	2 USB ports	2 USB ports	2 USB ports
1 FireWire port	1 FireWire port	1 FireWire port	1 FireWire port
RGB video out	RGB video out	RGB video out	RGB video out
Audio/video out port	Audio/video out port	Audio/video out port	Audio/video out port
8MB VRAM	8MB VRAM	8MB VRAM	8MB VRAM
White and Silver	White and Silver	White and Silver	White and Silver

Make That To Go

Apple has coined the phrase "Your Life. To go" as the marketing hook for the new iBooks. Here are some other items you can get to go.

Big Mac and fries: You can also Super Size it.

Chinese food: Comes with free delivery.

A bride: The mail-order variety.

Memory: Buy it at MemoryToGo.com.

Mobile home: Comes complete with kitchen sink.

Quick Facts

The 5 Million Mark

Apple announced back in April that it shipped its 5 millionth iMac. What does a figure that large actually add up to?

- A stack of 5 million iMacs would measure at least 1,184 miles deep. That's about one-third of the way down to the center of the Earth.

New Book, Old Book, White Book, Snow Book

Whether you call the new iBooks Snow or White, they boast some substantial hardware improvements that set them apart significantly from earlier models.



G3 Processor	500MHz	366MHz or 466MHz
Base Price	\$1,299	\$1,499
Weight	4.9 pounds	6.7 pounds
Thickness	1.4 inches	1.8 inches
Screen Resolution	1,024 by 768	800 by 600
Number of USB ports	2	1
RAM Expansion	640MB (576MB for base model)	320MB
Colors	White and Silver	Indigo or Key Lime
Looks Like a...	Giant Chiclet	Purse

Back to School

Apple Rejoins the Race to Educate

Last year Apple lost its dominance in the education market to Dell Computer, according to market research from IDC. On the warpath to win back its rule, Apple has since unleashed a 600-person educational sales force and nationwide series of technology workshops for K through 12 educators. Apple extended the ultimate olive branch—the first order for iBooks—to a school district in Virginia. The district ordered 23,000.

"It's in the DNA of our company," Jobs said of Apple's participation in the education market.

Dr. Mark Edwards, superintendent of Henrico County Public Schools in Virginia, said the first of the iBooks would arrive this summer, one for each student in the district's eight high schools. Of the deal with Apple, Edwards said, "We are totally pumped about it."—NR

X-It Interviews

Q&A with a Mac OS X Developer

Why bring an app to Mac OS X, and what's involved in the port? We didn't know, so we asked one of the biggest OS X software developers, Macromedia, about its products for the new operating system. *MacAddict* spoke with Scott Thompson, senior software "alchemist" for Macromedia's FreeHand 10 for Mac, an OS X port.—IS

MacAddict: How long did the port to Mac OS X take to build?

Thompson: It took a little over a year from beginning to end—but that included adding some features. The port was part of the move from FreeHand 9 to FreeHand 10.

MacAddict: What's the best thing about coding for Mac OS X?

Thompson: The tool set. Under Mac OS 9, an entire class of problems crops up (memory errors and the like) that are difficult to debug. Under Mac OS X, you can catch these errors using the debugger and fix them easily. That makes the Mac OS 9 version of the software better as well!

MacAddict: What's the worst thing about coding for Mac OS X?

Thompson: Trying to develop code for an operating system that's under active development using development tools that

are also under active development can leave you in a nebulous state where it's not at all clear what's at fault when you run into problems. There's also a lack of documentation at the moment.

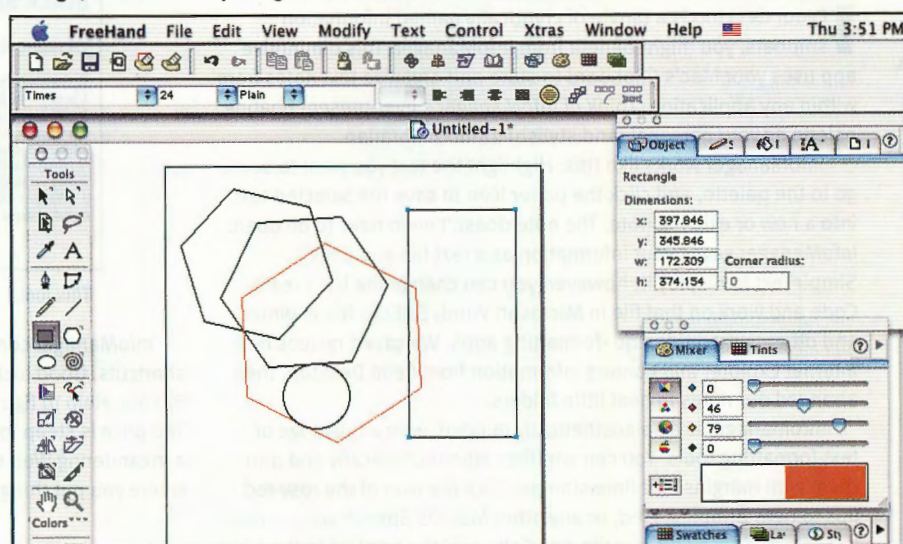
MacAddict: What new feature of FreeHand 10 are you most proud of?

Thompson: Well, personally I'm most proud of the Carbonization, because that's the piece I've been working on! Overall, though, I'd have to say the gradient blend

tool is probably the coolest new feature—it lets you create all sorts of interesting 3D-ish textures.

MacAddict: Are there any Mac OS X-specific features in FreeHand 10?

Thompson: Our goal with FreeHand 10 was simply to get it onto the Mac OS X platform. Now that we're there, we're actively considering using OS X features like Quartz and Unicode support for the next version of FreeHand.—IS



FreeHand 10 runs native (Classic-free!) in Mac OS X.

- Placed side by side, 5 million iMacs would wrap around the Earth at the equator 20 times in a giant display of unity not seen since the 1990 hit single "We Are the World."

- A heap of 5 million iMacs would weigh approximately 175 million pounds—that's about 1,000 times the weight of the space shuttle Endeavor (with main engines installed).

iMac Survival Challenge

Left to Its Own Devices, Can the iMac Make It in the Australian Outback?

On one of the last few episodes of the CBS reality TV show *Survivor II*, contestants in the Australian outback chatted with family and loved ones at home via an Indigo iMac! This got us thinking, what are the iMac's chances for survival Down Under?—CL

Situation: Poisonous snake bite

Survival Rating: Good

Reason: Snake versus plastic? Synthetic materials win every time.

Situation: Torrential rainfall

Survival Rating: Slim to decent

Reason: The Queensland tropics (where *Survivor II* was filmed) see an average of 1 to 12 inches of rain per month. Since rainwater is fairly pure, there's a *chance* the iMac would boot up after drying out, but we wouldn't bet on it.

Situation: Flash flood

Survival Rating: Slim

Reason: Twigs, rocks, crud, dirty water—the iMac is most likely screwed in a flash flood.

The Indigo alliance sold me down the river.

Situation: Stolen by a kangaroo

Survival Rating: Good

Reason: Babies of the red kangaroo leave the pouch when they weigh approximately 4.5kg. The iMac weighs in at 15.8kg. Ouch.

Situation: Temperature extremes

Survival Rating: Decent to good

Reason: Temperatures in the Queensland tropics fluctuate between 46 and 84 degrees Fahrenheit on average. The iMac's operating temperature is between 50 and 95 degrees Fahrenheit. The iMac should survive except on really hot days.

Situation: Humidity

Survival Rating: Decent to good

Reason: Queensland humidity can reach the high 90s, and the iMac can withstand humidity up to 95 percent. The iMac shouldn't even have a bad hair day.

Situation: Altitude

Survival Rating: Good

Reason: The highest point in the Queensland tropics is 1,622 meters. The iMac will operate at up to 3,000 meters. However, if someone pushes it off a cliff, the iMac's chances for survival decrease rapidly.



ORIGINAL PHOTOGRAPH BY DEBBIE LU
iMAC PHOTOGRAPH COURTESY OF APPLE COMPUTER

Shareware Pick of the Month

InfoManager 2.0

PRICE: \$49.95 **URL:** www.kagi.com/macease

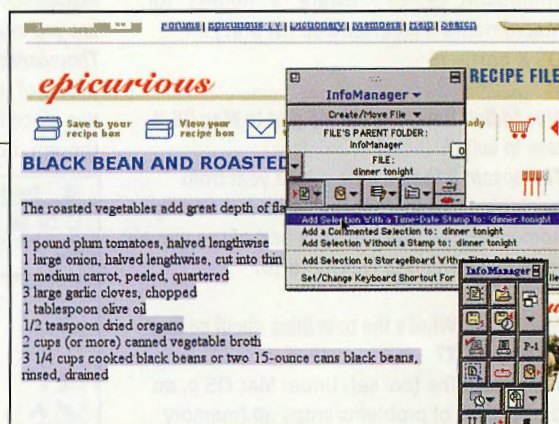


Find a
InfoManager
2.0 demo on
The Disc.

If your desktop is a tangle of cryptically named information snippets, you might benefit from InfoManager. This diminutive app uses your Mac's Clipboard to store and organize text notes from within any application. Think of InfoManager's ever-present floating palette as your personal (and stylish) 24-hour librarian.

InfoManager works like this: Highlight the text you want to save, go to the palette, and click the paper icon to save the selected text into a new or existing note. The note doesn't even have to be open. InfoManager saves your information as a text file and uses SimpleText to display it; however, you can change the File Creator Code and work on that file in Microsoft Word, BBEdit, Nisus Writer, and other text-editing and -formatting apps. We saved recipes from Internet Explorer and contact information from Palm Desktop, then arranged our notes in neat little folders.

InfoManager is also aesthetically minded, with a full range of text-formatting tools. You can sort lists alphanumerically and print them with margins and time stamps. Click the icon of the rosy-red lips to hear Bubbles, Fred, or any other Mac OS Speech voice speak the selected text. Our favorite was Cello, which sang text to the tune of Edvard Grieg's *In the Hall of the Mountain King*.



This looks yummy. We'll just save it for later.

InfoManager comes with a slew of keyboard shortcuts. Good luck memorizing them. We needed Balloon Help to figure out what the myriad of icons did. The price is steep for shareware (\$49.95), but if you're a meandering Web surfer with a knack for forgetting where you put things, this one's for you.—NR

This formatting palette will beautify all your notes.

Quick Facts

The 5 Million Mark

- Those 5 million iMacs spent up to 95 years connecting to the Internet, based on Apple's estimate that users can get online within 10 minutes of opening the package.

- The 5 million iMacs cost at least \$4 billion, which is roughly the 1999 gross domestic product of Burundi, a country in Central Africa.

Our Picks: Free Web-Based Calendars

Clear Your Day, Not Your Wallet

All you need to organize your life using one of these nifty calendars is a Mac and an Internet connection, and who doesn't have *those* already? So get on out there and start scheduling. —AT

NETSCAPE CALENDAR

www.netscape.com

You may think Netscape's browser sucks, but its calendar feature turned our heads. Like others, this calendar keeps track of appointments. Unlike others, it extracts date and time information from Netscape's database of events—book releases, local festivals, holidays, concerts, and our favorite television shows—and marks it on your personal calendar. You'll never miss *The X-Files* again.

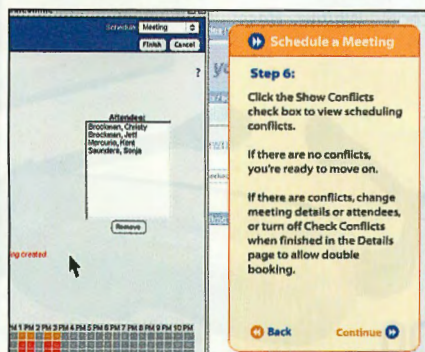


Netscape Calendar can even tell you which episode of *The X-Files* is airing tonight.

SCHEDULEONLINE

www.scheduleonline.com

This one's great for groups. The free Silver-level membership keeps track of everyone's appointments through a series of screens. Schedule a group meeting, then check to see if it conflicts with anyone else's appointments. Should you get *really* serious about scheduling, you can upgrade your account to Gold level, which adds immediate access to group schedule conflicts.



New to scheduling? ScheduleOnline offers a tutorial on its features.

CALENDARS.NET

www.calendars.net

Calendars.net lets Webmasters embed a calendar in a Web page, then display that calendar with pizzazz. Format your events and appointments in multiple colors and add animated GIFs. Internet Explorer users can even place text that scrolls sideways within date fields.

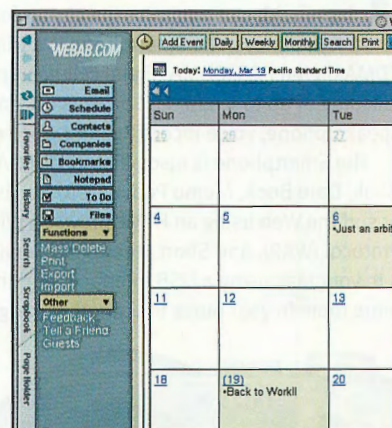


Why go to a calendar's Web site when it can come right to yours?

WEBADDRESSBOOK

www.webaddressbook.com

WebAddressBook's calendar is our winner for overall productivity. It offers Webmail, an email feature that manages your POP3 email accounts in full HTML; bookmark storage with import and export support for Internet Explorer and Netscape; a notepad that integrates your contact information; a to-do list with schedule integration; and data import and export functionality from a variety of PIM programs.



Chock-full of features, WebAddressBook is our favorite free Web-based calendar.

The Magical Mystery MPEG-4

What Is It and Where Is It?

MPEG-4 is like the emperor's new clothes: hailed as great, but invisible to most people. At least now we can see the outlines of undergarments. At April's National Association of Broadcasters trade show in Las Vegas, a few companies (like Apple and Media 100) showed off MPEG-4 encoding technologies for streaming video.

Unlike its siblings—MPEG-1 (popularly used for VideoCDs) and MPEG-2 (used for DVDs)—MPEG-4 promises to deliver high-quality video at extremely small file sizes,

making it the perfect vehicle for streaming media. Plus it's not a bandwidth snob. It scales well from 28 Kbps to 10 Mbps for viewing on a PowerBook, PDA, cell phone, set-top box, iMac connected via dial-up, or a DSL-connected G4.

Apple announced a preview version of QuickTime with support for MPEG-4 encoding and decoding. In private briefings at the show, the company unveiled its own MPEG-4 video codec but didn't announce firm availability dates for products.

So where are the products? Part of the holdup is that companies are waiting for MPEG-4 intellectual property owners (including Philips and IBM) to set the licensing fees. Sorenson Media is one such company. "We're finished with our codec, and we're ready to rip," said Ed McGarr, Sorenson Media's vice president of sales and marketing. "We have potential customers waiting at bay." Sorenson Media announced its MPEG-4 beta at San Francisco's Macworld Expo in January 2001. —NR

• With 5 million iMacs, there's roughly one iMac for almost every person in the former Soviet Republic of Georgia in the year 2000. This leaves 19,538 people afflicted with iMac envy, however.

• Since the iMac efficiently puts the computer and monitor into one unit, those 5 million iMacs saved the Earth at least 15 million feet in monitor cables (this calculation is based on the standard 3-foot cable).

get info

droolworthy

Free yourself from the mobile mess.



QCP 6035 Smartphone

Kyocera www.kyocera-wireless.com \$499

The Kyocera Smartphone, a combined cell phone and Palm OS handheld, can minimize the clutter for gadget geeks.

At 7.34 ounces, the Smartphone is a trimodal cell phone with CDMA digital PCS, CDMA digital cellular, and analog coverage. With talk time of up to 5 hours (180 hours on standby), it features a speakerphone, voice recording, and voice dialing.

The Smartphone is also a Palm OS PDA with standard Address Book, Date Book, Memo Pad, and To Do List features. Send email or surf the Web using an HTML browser, Wireless Application Protocol (WAP), and Short Messaging Service (SMS). Even Hot Sync it to your Mac using a USB interface. And the Smartphone leaves more room in your purse for...another gadget.—Whitney Hess

PHOTOGRAPH COURTESY OF KYOCERA

Eye-Trek FMD-700

Olympus www.olympus-eye-trek.com \$1,199.95

Do you fancy having a private movie theater everywhere you go? Olympus's new Eye-Trek FMD-700 gets you out of the multiplex and right into the movie.

Plug the glasses into any device with RGB video-out to watch video on the Eye-Trek's LCD screen. Olympus says the viewing experience is equivalent to watching a 52-inch screen from 6.5 feet away. Video quality is 720,000 pixels with a horizontal resolution of over 500 lines. The Control Unit also has an audio-in port for the ultimate in surround sound.

You could get 150 movie tickets for the price, but would they be as cool?—Whitney Hess



You always wanted a portable movie screen.

PHOTOGRAPH COURTESY OF OLYMPUS

MVC-CD300

Sony www.sel.sony.com \$800

Prolific photo takers have yet another option for shoving loads of digital pictures onto teensy-tiny media. The MVC-CD300 is the newest addition to Sony's Mavica series. This 3.3-megapixel camera records images and MPEG video directly onto a mini 8cm CD-R or CD-RW disc, each of which can store 156MB of data. The camera also features 3X optical and 6X digital zoom, a 2-inch LCD, a 3-shot burst mode, and sophisticated manual controls.

So why invest in yet another media standard when you just robbed the town bank to purchase a handful of SmartMedia and CompactFlash cards? It's cheap. Each CD-R costs about \$5, and a CD-RW costs about \$8. The catch? The camera itself is about \$800.—NR

PHOTOGRAPH COURTESY OF SONY



Go crazy taking pictures—this little device can store 'em all for you.

Inappropriately Named Products

Some products leave you feeling just a little, well, soiled after you say their names. Hey, don't blame us. We didn't make them up.—DR

FunStick Pro
Macsense, www.macsense.com

Kai's SuperGoo
ScanSoft, www.scansoft.com

MPecker (changed to MPegger)
Proteron, www.proteron.com

ThrobberDeveloper
Vizspring Software,
www.vizspring.com

ThrustMaster ThrustWare
ThrustMaster,
<http://us.thrustmaster.com>

BodyPaint 3D
Maxon Computer,
www.maxoncomputer.com

Airport Throbber
Todd Bangerter,
www.versiontracker.com

Microsoft anything
(Cheap shot, we know.)

Quick Facts

The 5 Million Mark

- iMac users have defended their hardware color choice at least 5 million times. We have no hard facts, but we're pretty sure Tangerine got a few glances.
- iMac users have thought about buying an external Zip drive at least 5 million times. A group slightly short of that number has considered an external floppy drive.

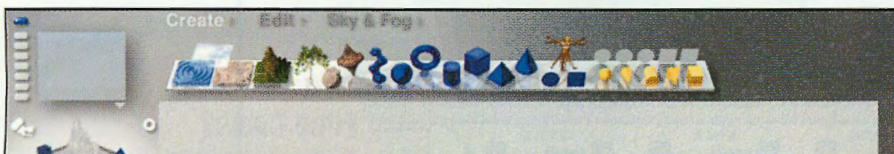
If your daily mood swings depend on whether QuarkXPress is running smoothly, or if you live and die by Photoshop, you may need to wait a bit longer before migrating to Mac OS X. *MacAddict* talked to some graphics-centric companies to find out how they're coping with the port to OS X.—CL

Adobe

Adobe has promised Mac OS X support for all of its major apps. According to Dave Evans, Adobe's senior evangelist of professional publishing, the next major releases of Adobe's premiere products should be OS X native. Adobe did demo a pretty slick version of InDesign running under OS X at Seybold, so we know one exists, but mum's the word on when you can expect Carbonized versions of Photoshop, Illustrator, GoLive, and InDesign.

Corel

The company that Mac users have traditionally loved to hate is finally promising to deliver just what graphic artists want: brand-new, fully Carbonized versions of Bryce 5 (summer), Painter 7 and CorelDraw 10 (late summer), and KnockOut 2.0 and KPT 7 (late fall). But as Ian LeGrow, Corel's executive vice president of creative products, tells it, the road to X-ville has not been entirely smooth.



The Bryce 5 interface is a refreshing change from candy buttons.



Transparency is one of the cool new features of the officially unannounced (or is it unofficially announced?) Mac OS X version of InDesign.

For one, the company had to develop CorelDraw based on betas of CodeWarrior, which was in turn based on betas of Mac OS X. Then there's the issue of porting the user interface—applications like Bryce, which utilize a specialized UI, are a bit easier to port than programs that will adopt the Aqua interface. Finally, the Mac OS X debugger doesn't stop at the actual line that contains the bug. "It's like going back ten years in terms of tools," says LeGrow.

Quark

Quark, the company that always shows up late to the party but still ends up drawing a crowd, is firmly on the Mac OS X boat. But first it needs to deliver on QuarkXPress 5.0, which will run under Mac OS X in Classic but will not be Carbonized. Quark 5.0 will ship "when it's done" (developer-speak for "we're late."). It was in the alpha stage as of March.

According to Brett Mueller, product manager for QuarkXPress, the version that follows 5.0 will be OS X native. The company will hopefully release it three to five months after 5.0 comes out. Quark's goal is to finish a native version by the time its customers are ready to move to Mac OS X—according to Quark's research, that will be in early 2002.

TECHinfoTIDBITS

Random Notes from the TIL

Recharging Your Laptop Battery

Is your PowerBook G3 or iBook battery losing juice? Does the battery icon fail to show up in the Control Strip, or does a red X appear over the battery extension during startup? Try running Battery Reset 2.0, a small software utility (consisting of an extension and an application), downloadable from <http://asu.info.apple.com/swupdates.nsf/artnum/n11542>, that resets your battery so it will fully discharge and recharge.

Using the utility is easy for iBook owners (lucky sods). Once you install Battery Reset 2.0, the extension itself should fix any battery problems. Things are a little more complicated for PowerBook

G3-series owners. After running the Battery Reset 2.0 extension and app, restart and run the newly installed program to reset the battery—make sure you plugged the PowerBook into a wall outlet.

After running the app, eject and reinsert the battery to start charging. A lightning bolt should appear on your screen. If it doesn't, run the app a second time. Since the application drains the battery, you'll have to recharge it before your second run.

One final note: On PowerBook G3-series Macs, you may have to reset your AppleTalk connection, time zone, key repeat rate, and alert sound after running the utility.—DR

These tips, tricks, and tawdry stories were taken from Apple's Tech Info Library at <http://til.info.apple.com>.

- Apple has tried to seduce you into buying an Earthlink account at least 5 million times, using an option to connect to the Internet through the popular ISP.

- In anticipation of this sales goal, Apple tried to cram 5 million dots onto the Blue Dalmatian iMac. Instead, that model achieved the dizzying effect you get from trying to hold your breath too long.

scrapbook

Tempering the gospel with a reality check.

Sakes Alive: It's QuickTime 5!

by Narasu Rebbapragada

Why should you download the QuickTime 5 media player? Because this new rev is a lean, mean streaming machine. And it's free!

The Spinout 360

Why are these trees upside down? Because QuickTime 5 debuts Cubic VR, a technology that generates seamless 360-degree panoramas of products, projects, cities, landscapes, or just about anything else you want to see up, down, and all around. Warning: Some Cubic VR movies provide great insight, others just make you nauseous. View sample movies at your own risk at Apple's Cubic VR Gallery (www.apple.com/quicktime/products/gallery).



Fuzzy Wuzzy Was on a Reconnaissance Flight

Some QuickTime TV streams come in at higher quality than others. This ghostly-looking segment is about detained U.S. navy personnel returning from China.

Sound Off

Now you can access a graphic equalizer right on the player's face. Choose Show Sound Controls from the Movie menu, then adjust the Bass, Treble, and Balance to your tastes.

How Ya Streamin'?

Does your download seem a little slow or fast? Find out by choosing Get Movie Properties from the Movie menu to check Data Rate, Packet Loss, Buffer Size, and other information about your streamed movie.



Show More Skin

That silver window's so square, isn't it? QuickTime 5's custom skins let you slip into something a little hipper. Content creators can add skins like the one shown here to their media. Unlike Casady & Greene's SoundJam, where you add skins to the player itself, QuickTime 5 stores the skin as an additional track, attached to the content itself.

Flash 4ward

QuickTime 5 supports Flash 4, which content creators can use to add increased interactivity to a QuickTime movie. QuickTime 4 supported Flash 3, but if you're viewing media created in Flash 4, you'll need QuickTime 5 to take full advantage of its features. Apple also enhanced MPEG-1 support to include streaming. Previously, QuickTime 4 users could view MPEG-1 content only if they downloaded it locally to their hard drives. MPEG1 is a popular format for Video CDs and for educational video.



Free Cable?

Well, sort of. Click the TV button, and the QuickTime 5 player opens the window at right, where you can choose from a wide variety of news and entertainment movies. You can save any movie as a Favorite, then access it quickly by clicking the heart icon behind the TV tab.



Committed to Extending OS X Support!

Sonnet Technologies Mac® OS X Support Solutions

Regardless of what you may have heard, many Macintosh® computers enhanced with Sonnet processor upgrades can run OS X! If your Power Macintosh G3 or G4 computer is enhanced with a Sonnet processor upgrade, you're set—our Encore™ product line supports Mac OS X now. Do you have an "officially" unsupported PCI machine such as a Power Macintosh 7300/7500/7600, 8500/8600 or 9500/9600? With Sonnet, you're covered—Sonnet has engineered a breakthrough OS X compatibility solution for these computers when combined with our popular Crescendo™/PCI upgrades! Delivery is slated for late May 2001, available for download. As for PCI adapter cards, our Tempo™ Ultra ATA66 and Tango™ FireWire®/USB cards are OS X compatible today.

Great News for Newer Technology Customers

There's no need to feel left out if you're a Newer Technology customer—Sonnet's commitment to extending Mac OS X support also includes a program for MAXpower ZIF and MAXpower PCI G3/G4 processor upgrades! Sonnet will release OS X compatibility solutions for MAXpower processor cards in the near future.

If you own one of these Macs and Sonnet makes a product to go into it, then we have an OS X solution for You!

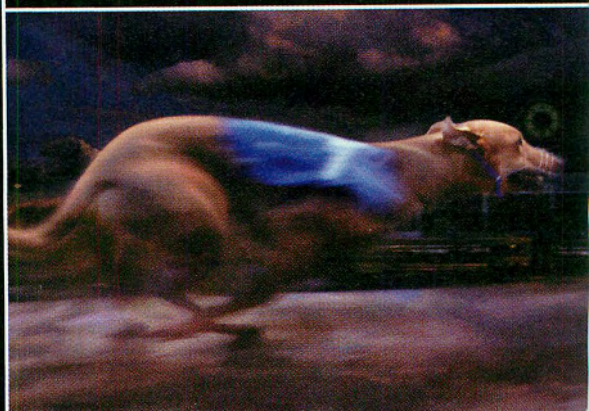
- ▶ Power Mac G3 & G4 Series
- ▶ Power Macintosh 7300, 7500, 7600 Series
- ▶ Power Macintosh 8500, 8600 Series
- ▶ Power Macintosh 9500, 9600 Series
- ▶ G3 All-in-one
- ▶ G3 Blue & White
- ▶ G3 Desktop
- ▶ G3 Minitorwer
- ▶ G3 Server
- ▶ PowerTower Pro
- ▶ PowerWave
- ▶ UMAX J700, S900

X
Mac OS X
Ready

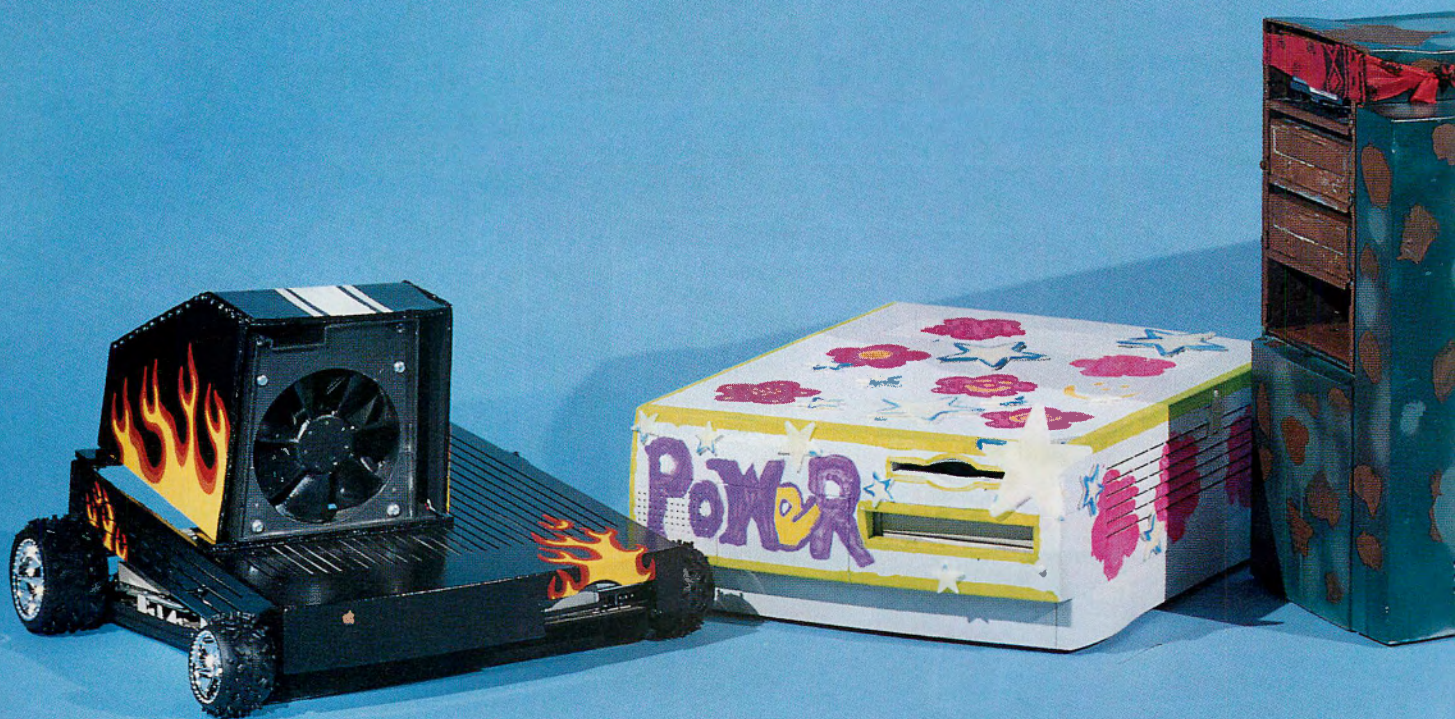


SONNET
SIMPLY FAST™

For a complete statement on Sonnet's Mac OS X compatibility solutions, go to
www.sonnettech.com/news/macosex_update.html



Nitro-Burning Funny Macs



WE SOUP UP FIVE OLD MACS TO THE MAX!

Who says beige can't be beautiful? We do, that's who. You don't have to banish that old clunker of a Mac to the dustiest corner of the garage, like a beat-up Chevy, in favor of its hot-roddin' G4 or Titanium cousin. Instead, embrace it. Nurture it. Give it a little lovin'.

There's never been a better time to pull out a Mac that's getting on in years and give it the full restoration treatment, complete with engine upgrade, memory boost, and cherry paint job. In most cases, 128MB of RAM costs less these days than taking a family of eight to the movies, and thanks to upgrade-card manufacturers, it's possible to shoehorn a G3 or G4 into just about any old Mac (even a 25MHz LC—and yes, we show you how). Add to that the fact that decent video cards and FireWire-USB PCI cards are becoming more affordable, and you've got no excuse *not* to upgrade your old Mac. We even found out that spray paint, for the most part, doesn't cause (too) much damage.

In celebration of the bygone era when all computers were boring plastic boxes, we pulled out a 9600, LC 475, an original iMac, beige G3/233 desktop, and Lombard (or Bronze) PowerBook G3, and spent the last few months slaving away in our *MacAddict* workshop (aka an office space we squatted in without telling our facilities department). During that time, we turbocharged these machines with the coolest upgrade parts we could find, gave them personalities, and otherwise spiffed them up—turning them into nitro-burning funny Macs. All of these Macs are now high-powered speed demons, prepared to take on any iMac or G4 in their way—and they look a lot meaner, too. (Flower power? Whatever. Save it for your VW Bug.) So stop letting Steve Jobs tell you how to express yourself and let your true personality come out. You don't have to give in to Dalmatian décor anymore.

by the MacAddict Staff

photography by Arnold Tiosejo



HEALTHY UPGRADE ADVICE

So you have an old Mac lying around, and you're not sure whether it's worth salvaging or whether you should just head to the scrap yard. Should you decide to hit the upgrade path, keep in mind these pieces of sound advice.

1 If you plan on making a series of upgrades, test your machine after you complete *each upgrade* to make sure it is still working. That way, if something goes wrong (say, your Mac doesn't start up), you can pinpoint the problem more easily.

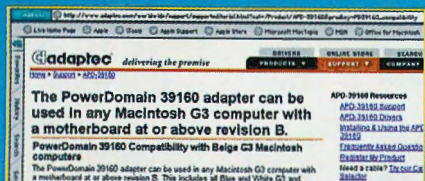
2 If you're considering a heavy-duty overhaul, map out the total cost of all of your upgrades versus what you could get from selling that system and buying a newer machine. Although admittedly you might find ripping apart an old Mac fun and therapeutic, it may not be worth the money.

3 If you're working inside your Mac, either wear an antistatic strap or make sure that while your Mac is plugged in, you touch the metal chassis of your power supply (the block that your power cord plugs into) to ground yourself. (If you're a PowerBook user, touch the heat sink.) Processors and static electricity don't mix.

The antistatic strap is not as stylish as the Madonna bracelets of the eighties, but those never saved your Mac from being zapped by static.



4 Before you buy any upgrade parts, check the manufacturer's Web site to make sure the item is compatible with your Mac. For instance, we found out a little too late that an Adaptec PowerDomain 39160 SCSI card was not compatible with our first-generation G3.



Oh, crap! We've got Rev. A.

5 If you want to speed up your machine, your number one upgrade should be RAM. Most RAM is dirt cheap these days, and this will do a lot to boost your machine's performance. We recommend you upgrade to at least 128MB.

6 If you have any free PCI slots and your Mac lacks USB or FireWire, one of the best investments is a combination FireWire and USB card. This will open your Mac to a whole new world of peripherals it never knew before.

7 If you're heavy into graphics apps or gaming—and you're considering a processor upgrade—think about getting a slightly less impressive upgrade card paired with a new graphics card. Combined, these two upgrades will often go further to enhance your performance than one mega 900MHz G5 card (OK, in our dreams). Also remember that many old video chips don't even support 3D hardware acceleration, so an ultrafast CPU upgrade won't do you a spit of good.

8 If you plan to perform a series of upgrades, including taking your chances on Mac OS X, leave the operating system upgrade for last. The OS X installer is more fidgety than a 10-year-old sitting in math class on a summery day.

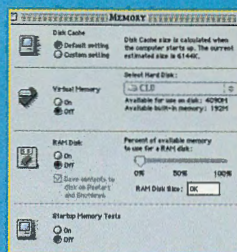
9 If you're upgrading an older machine with an internal SCSI hard drive, consider sticking a FireWire card in a PCI slot and getting a FireWire drive or a FireWire enclosure with an IDE drive. SCSI drives are pretty expensive these days, and you may be better off going the external route.

10 Take some time to get to know your PCI slots. The 64-bit slots common in today's Mac are longer and can take any PCI card. Unfortunately, the 32-bit slots of older Macs (pre-blue-and-white G3s) can't accept cards built to take advantage of the faster throughput that longer slots offer.

11 If you're replacing your processor card, first back up any irreplaceable files on your hard drive and update your firmware. Hit the Apple site to get the latest versions.

12 If you've installed some brand-new RAM but your Mac doesn't recognize it's there, try zapping your PRAM (Command-Option-P-R). Or you can try turning off your memory startup tests, which sometimes don't recognize non-Apple-certified RAM. To do this, press Command-Option while opening the Memory control panel and click Off.

Turning off these tests may help your Mac recognize your new RAM.



Hitting the Web

They don't call it the World Wide Web for nothing. The Internet is a vast mixture of useless and useful information, and at times finding exactly what you need can be difficult. Here are the places on the Web to check out if you're serious about upgrades.

For info on your machine:
Apple Product Documentation Archive—download Apple manuals.
<http://support.info.apple.com/manuals/manuals.qry>

Apple Tech Info Library—read up on known Mac problems.
<http://til.info.apple.com>

Apple Memory Guide—figure out your Mac's RAM configuration.
<http://asu.info.apple.com/swupdates.nsf/artnum/n10084>

For other healthy upgrade advice:
Accelerate Your Mac—for just about any upgrade information you need.
www.xlr8yourmac.com

The Tech Page—jumper configuration info on IDE and SCSI hard drives.
www.thetechpage.com/cgi-bin/default.cgi

Drive Compatibility Database—find out what hard drive models work with your Mac.
<http://forums.xlr8yourmac.com/drivedb/search.drivedb.lasso>

Bare Feats—speed tests on different upgrade options.
www.barefeats.com

Version Tracker—downloadable Apple updates, searchable by model.
www.versiontracker.com/systems/system.shtml

For upgrade parts:
Dealmac.com
www.dealmac.com

Galaxy Hardware Publishers
www.galaxyhp.com
MicroMac
www.micromac.com
NexComp
www.nexcomp.com
Other World Computing
www.macsales.com
Shreve Systems
www.shrevesystems.com
Sun Remarketing
www.sunrem.com
Trans International
www.transintl.com

For processor upgrades:
Sonnet Technologies
www.sonnettech.com
XLR8
www.xlr8.com
PowerLogix
www.powerlogix.com

For hard drives:
IBM
www.ibm.com
Maxtor Corporation
www.maxtor.com
Seagate Technology
www.seagate.com
Western Digital Corporation
www.westerndigital.com

For PowerBook parts:
Mac Components Engineered
www.powerbook1.com

For parts from individual sellers:
EBay
www.ebay.com
UseNet newsgroups (try groups.google.com to look up a newsgroup)
comp.sys.mac.wanted
comp.sys.mac.forsale

For RAM:
Ramseeker
www.ramseeker.com
Ramjet
www.ramjet.com
Memory To Go
www.memorytogo.com
MemoryX
www.memoryx.net

Hot-Rod Elsie

Once a sluggish 25MHz Macintosh LC 475 pizza box, Hot-Rod Elsie now careens through modern-day apps with a swift 333MHz G3 processor, showing off a mean, sporty exterior that houses 256MB of RAM and a 40GB hard drive. She can even seat up to three PCI cards, thanks to her convertible turbo scoop. No longer just a bookend, Hot-Rod Elsie leaves her 680X0 siblings in the dust. She's ready to cruise through games, apps, and Internet sites with ease.

The Parts

Apple G3/333 motherboard, power supply, and fan (salvaged from an old beige G3)
40GB Barracuda ATA III hard drive (\$229 SRP, Seagate Technology)
Two 128MB RAM DIMMs (\$65 each ESP, Ramjet)

The Upgrade

1. Processor. We gutted our LC like a fish to make room for the G3 motherboard.

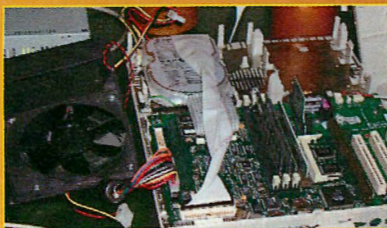
2. RAM. We installed two 128MB DIMMs to give Elsie a brainy 256MB of memory.

3. Storage. Because the LC's case is fairly small in comparison to the beige G3's, we had to screw in the hard drive backward to accommodate its connection.

What a mess! Because of the LC's petite body, we had to put the fan and power supply on the outside and install the hard drive backward.



After gutting the interior, we revised the metal chassis and plastic supports.



4. Expansion Cards. We cut a large rectangle out of the case's top to access the PCI slots. Because of the tight conditions, we mounted a fan on top of the case to keep things cool down below. We built the scoop to force air down—we recommend using heat-resistant material, such as Plexiglas.

5. The Externals. To make the monitor, serial, ADB, and Ethernet ports accessible, we cut the back of the LC's case. We also jacked up the back of the casing—not just because it looks cool, but to allow enough clearance so we could attach the power supply to the motherboard. Because of its size, the power supply rides shotgun on the outside.



Omigod! It really works!

The Deal with Mac OS X

Two words: kernel panic. Installing Mac OS X was a no-go.

Other Upgrade Options

PCI Add-Ons. With the available PCI slots, adding FireWire, graphics cards, audio cards, and other niceties becomes a reality. A CD-ROM and Zip drive are also welcome passengers.



iMacshall Road Rocker

The iMacshall Road Rocker is a state-of-the-art sonic explosion of aural fury. Armed with an arsenal of amp-melting virtual stomp boxes, the Road Rocker acts as a preamp to transform the wimpy pluck of any cheap electric guitar into a stadium-ready, ear-piercing howl. For the aspiring head-banger or the tech-savvy longhairs of the new millennium, the Road Rocker (once a Bondi Blue iMac) can turn just about anyone into a star.



The Parts

Newer Technology iMacpowr G4/433 upgrade card (no longer available)
256MB of RAM (\$96 ESP, Memory To Go)
Two audio-cable adapters, 1/4 inch to 1/8 inch (\$2 ESP, Radio Shack, www.radioshack.com)
Two audio cables, 1/4 inch to 1/4 inch (\$8.50 ESP, Musician's Friend, www.musiciansfriend.com)
Alesis RA-100 Power Amp (\$199 ESP, zZounds, www.zzounds.com)
Marshall 4X12 Half Stack speaker cabinet (\$390 to \$600 ESP, zZounds)
Steinberg Cubase VST/32 audio software (\$599 SRP, Steinberg, www.steinberg.net)
DSound Stomp'n FX, volume 2 (\$149 SRP, DSound, www.dsound1.com)

Marshall

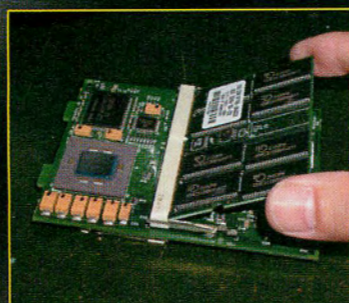
The Upgrade

1. Processor. To provide the raw horsepower our virtual preamp required, we had to boost the processor speed. A G4 was just the ticket to handle the load. The stock G3/266 on our Bondi baby took a backseat to a G4/433 card from Newer Technology, and the procedure was easy—we just swapped one card for another (while changing the RAM, which sits on the processor card). While Newer went out of business last year, you may still find its products on sites like eBay. Otherwise go for one of the G3 or G4 iMac upgrade cards from PowerLogix (\$299 to \$499 for G3s; G4s not available at press time).



Working with the innards of an iMac requires that you turn it upside down—save the painting for last.

2. RAM. Our audio application needed RAM—real RAM, not that virtual stuff. Adding 256MB to the 32MB onboard (for a total of 288MB) allowed us to run our audio plug-ins with room to spare. One lesson we learned: The big memory module goes on top of the processor card, and the little one goes on the bottom. If you try to seat a processor card in the slot on the motherboard with a 256MB module stuck to the bottom—well, you can't.



The big RAM chip goes on top. The little one goes on the bottom.

3. The Externals. To get that true Marshall look, we needed the Marshall colors: black and gold. We used masking tape, plastic bags, and clear tape to block out the areas we didn't want to paint. After blasting the iMac with black and then gold spray paint, we achieved something that approached the right look—we just needed a few fancy buttons and knobs. We painted a red rectangle around the iMac's power button. The knobs were just for show, so we affixed them with a little bit of glue.



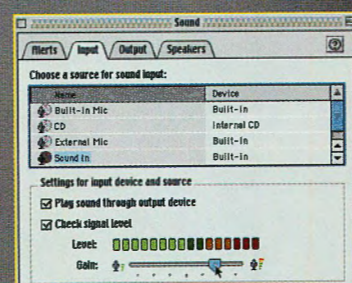
The Apple logo and the air vents kept their original Bondi blue shade, thanks to strategic masking.

4. Software. DSound's Stomp'n FX software, a set of plug-ins, mimics the look and sound of guitar stomp boxes (foot-controlled on-off boxes). You simply plug a guitar into the Mac to create distortion, chorus, echo, and other effects. We used Steinberg's Cubase VST/32 as a host application for this plug-in set, and set the software up so we could play "live" into the iMac and have the guitar take advantage of Stomp'n FX. We chose the DT-1 effect for some distorted rock-guitar sound.

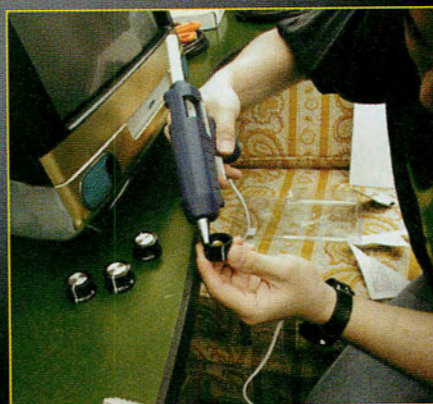
5. The Setup. We plugged a guitar directly into the iMac's microphone input using a standard audio cable with a miniplug adapter. The output of our electric guitar was lower than line level, so we used the Gain control in the Sound control panel to boost the signal. We could effectively use the iMac's built-in speakers to hear effects, but that kind of sucked. We wanted to plug into a real guitar speaker cabinet—however, we couldn't just connect the output of the iMac directly to the Marshall Half Stack because there wasn't enough power from the iMac's output to drive the four 12-inch Celestion speakers. So we fed a cable from the iMac's speaker output into an Alesis RA-100 amplifier for the power boost.



We didn't need a line-level converter to get our guitar sound into the iMac—we just used a standard cable and miniplug.



We boosted the guitar's signal by simply turning up Gain in the Sound control panel.



Since we were gluing the knobs onto the face, we affixed them in a "cranked to 11" position.

The Deal with Mac OS X

After performing all of the hardware upgrades, we installed Mac OS X. We didn't anticipate success, since Newer Technology, the upgrade card manufacturer, has gone out of business. Much to our surprise, Mac OS X installed and ran without a hitch.

Other Upgrade Options

Mezzanine Port. The old iMac has little in the way of upgrade options. It does, however, offer the Mezzanine port, so you might consider boosting the graphics performance by installing a Voodoo 3dfx card there. Though 3dfx has gone out of business, you might find the card on eBay.

MITT

MacAddict Industries Three Thousand, or MITT, is an artificially intelligent, indestructible, superfast, superpowerful, voice-controlled computer disguised as a Lombard (aka Bronze) PowerBook G3. She rides on wheels and her mission is to run all of our apps, surf the Web wirelessly, and support Mac OS X, all at record speeds. Oh, did we mention that she can defeat the evilest of enemies and save humanity, too?



The Parts

BlueChip LS G3/500 upgrade card (\$599 SRP, PowerLogix)
256MB of RAM (\$96 ESP, Memory To Go)
VST Expansion bay Zip 100 drive (\$220 SRP, SmartDisk, www.vsttech.com)
VST Expansion bay 10GB hard drive (\$500 SRP, SmartDisk)
VST Expansion bay DVD-ROM drive (\$250 SRP, SmartDisk)
Agere (previously Lucent) Orinoco PC Card (Silver) (\$133 ESP, www.orinocowireless.com)
AirPort Base Station (\$299 SRP, Apple, www.apple.com)
Scanning lights (\$35, specialist import store for car parts)
iListen speech recognition software (\$139 SRP, MacSpeech, www.macspeech.com)
Parrott Jamaica USB headset and microphone (\$70 SRP, VXI, www.vxicorp.com)

The Upgrade

1. Processor. We wedged a PowerLogix upgrade card into MITT and subsequently booted her up with absolutely no problems. The BlueChip card is available for the Lombard G3, as well as the older Wall Street and Main Street G3 PowerBooks (233MHz and up). You can opt for the top-of-the-line 500MHz card or go for the slower 466MHz. We chose to give MITT a turbo boost up to 500MHz, because how else can we expect her to save the world? One glitch: Several days after we inserted the upgrade card, our PowerBook started misbehaving—it wouldn't wake up from sleep and crashed at startup. We're not sure whether this problem resulted from installing the new card, but we corrected the errant behavior by resetting the Power Manager, which controls functions like sleep and wake, backlighting, and trackpad control. To do this on the Bronze model, shut down, then hold down the tiny reset button located between the external video and modem ports on the back panel for five seconds. (Check out Apple's Tech Info Library at <http://til.info.apple.com> to see how to reset the Power Manager on other PowerBook models).



Putting in a new processor card required that we move the RAM from our original card to the new one.

2. RAM. By adding 256MB of RAM, we bumped MITT up from 128MB to 320MB of memory. And no, you're not doing the math wrong. RAM on the PowerBook is a bit tricky. The device has two RAM slots—one on top of the processor card and one on the bottom (on the pre-FireWire PowerBooks, the bottom slot can only take low-profile modules, as opposed to standard-height ones). Since we initially had 64MB of RAM installed in each slot, we had to replace the top module altogether with our 256MB module. Note that while you can buy 32MB, 64MB, and 128MB modules that will fit into either slot, the 256MB module is only available for the top slot.



We had to install the lower-slot RAM module before placing the new processor card back in the PowerBook.

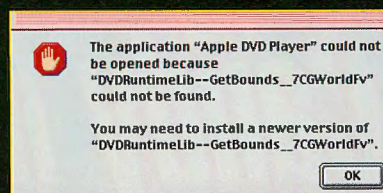


And there you have it—256MB of sheer OS X-consuming memory, baby!

The Deal with Mac OS X

MITT was running OS X long before we inserted our processor upgrade. Thankfully, that didn't present a problem. We ran the Flash utility that came with the upgrade card in Mac OS 9.1, installed the card, then booted into Mac OS X with nary a hitch. We even got a pleasant surprise—applications in the Classic environment actually ran at a respectable speed!

3. Expansion Bay. We gathered a set of expansion bays that we could swap in and out. These included a Zip 100 drive, a 10GB hard drive (we opted for a removable hard drive so we wouldn't have to store our top-secret data on MITT—after all, she might fall into the wrong hands), and a DVD-ROM drive. The DVD-ROM drive also required that we insert a DVD-video PC Card (included) when we wanted to kick back and watch movies to provide MPEG-2 decoding. We only ran into one hitch: When we launched Apple DVD Player (version 2.1), it gave us a strange error message (see the message, above). We then tried going back to an old version of the software (version 1.1, downloadable from the Apple site), which worked just fine.



All righty, then.

4. Networking. AirPort compatibility is a feature that started with the FireWire G3 PowerBooks—but that didn't stop us from going wireless. The Orinoco, a module you slide into the PowerBook's PC Card slot, allows your machine to interface with an AirPort Base station—great for quick Internet access while you're on a mission. One word of advice: When you configure your PowerBook to get on the network, use the AirPort software—not the Mac-unfriendly Orinoco software (note: Orinoco does not work on Mac OS X).

5. The Externals. We decided to give MITT a set of scanning lights as a tribute to her *Knight Rider* sibling. We powered the lights via a 9-volt battery and attached a switch so we could turn them on and off at will.

6. Software. Because every artificial intelligence device needs to understand its owner, we installed the iListen speech recognition software so MITT would react to our voice commands. Unfortunately, she doesn't respond to much more than "Open Internet Explorer," but it's a start. At this point, more training is in order.

Other Upgrade Options

1. Internal Hard Drive. To add more internal storage, all you need is a 2.5-inch notebook hard drive, available from IBM, Fujitsu (www.fujitsu.com), and any number of other companies. Note that different models allow varying drive heights—the Wall Street series allows you to go up to a 19mm drive, while the Lombard and FireWire models are limited to 12.5mm drives.

2. FireWire. If you're living in the pre-FireWire world, you can update your G3 PowerBook with a FireWire card bus, like those from Belkin (www.belkin.com).

3. CD-RW and Other Storage. Other VST expansion-bay options exist in the form of CD-RWs, SuperDisk drives, and Zip 250 drives.

The Candy Mac

The Candy Raver is your typical modern kid, decked out in lollipop-colored clothing, beaded necklaces, glitter, and fluorescent stickers. Powered by love (and other substances), Candy Ravers dance to the beats of happy hard-core music, spreading peace to all those who feel the vibe. The Candy Mac is their machine. It begins as a G3/233 desktop, gussied up in color on the outside and juiced with powerful upgrades on the inside. It pulls 45GB worth of nonstop beats, set to psychedelic swirly lights—emanating happy, happy, joy, joy to all those around.

The Parts

Newer Technology Maxpower G4/500 ZIF upgrade card (no longer available)
128MB of RAM (\$52 ESP, Memory To Go)
Radeon Mac Edition PCI video card (\$199 ESP, ATI Technologies, www.ati.com)
Nexus 128 card (\$211 SRP, ATI)
FireWire-USB combo card (\$110 SRP, Belkin, www.Belkin.com)
Two VST FireWire drives—20GB (\$470 SRP, SmartDisk) and 25GB (no longer available)
PV230 monitor (\$9,995 SRP, Panoram Technologies, www.panoramtech.com)
SoundJam MP Plus (\$40 SRP, Casady & Greene, www.soundjam.com)
ProMedia 2.1 speakers (\$300 SRP, Klipsch, www.klipsch.com)



The Upgrade

1. Processor. Installing the Maxpower G4 upgrade card was a painless procedure. The only catch was that initially we weren't receiving the full 400MHz of speed the card promised. To remedy that, we had to set the DIP switches on the card to match our G3's stock bus speed. The manual quickly and easily walked us through that procedure. The Candy Mac is a bit old skool—Newer Technology went out of business last December, so you'll have to scrounge around eBay or component stores for this card. Alternately, you can try Sonnet Technologies' Encore G4/400 card (\$350 SRP) or G4/500 card (\$500 SRP), or PowerLogix's G4/450 card (\$449 SRP).

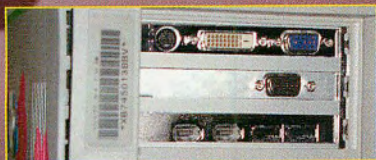


We had to remove the heat sink to get to the processor, lifting gingerly and making sure not to pull out the attached wire.

2. RAM. The hardest part about installing RAM is knowing which kind to get. The beige desktop G3 comes with three 168-pin DIMM slots. According to Apple's Tech Info Library, the Power Mac G3 desktop can support 384MB of memory if you use three low-profile 128MB DIMM cards. Without the low-profile cards, the computer is limited to three 64MB DIMMs for a total of 192MB. Since the Candy Mac only needs to run SoundJam, we decided to save some money and buy one 128MB card to bring us up to 192MB of memory.

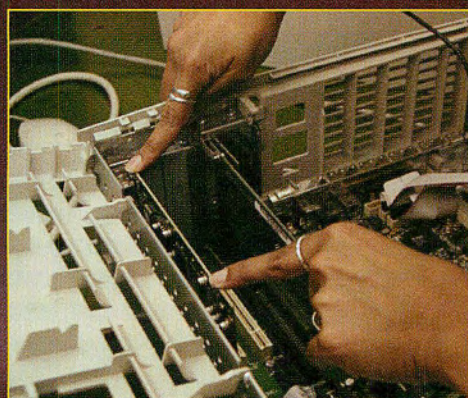
3. Storage. Our initial plan was to install a superfast Ultra160 SCSI card to power a four-drive RAID for hours and hours of endless heart-thumping music. Turns out our first-revision desktop G3/233 is the one G3 machine Adaptec's PowerDomain 39160 card doesn't support. Damn. We went with two FireWire drives instead (poor us) and ended up with 45GB of squeaky-clean external hard-disk space.

4. Expansion Cards. We stuck a FireWire-USB PCI card in the machine for our FireWire drives. The card didn't come with any drivers, so we had to go to Apple's support site (<http://asu.info.apple.com>) and download the latest versions of FireWire and USB adapter-card support.



Ports galore on an old beige G3—we installed three FireWire ports (one internal) and two USBs.

5. Graphics Cards. The Candy Mac arrived with three empty PCI slots, and we used two of them for video. Why? To drive our three-panel Panoram PV230 monitor. It requires three video cards, so we used the G3's original ATI Rage II graphics chip plus a Radeon card and a Nexus 128 card. We popped the cards into place, screwed them down, and turned on our machine, which didn't recognize them initially because we hadn't installed the latest drivers (downloadable from ATI's site.)



Grabbing the card on both ends and gently rocking, we eased the Radeon card into the PCI slot. It required a firm push—but no excessive force.

6. Monitor and Speakers. After we hooked our PV230 to the three monitor ports, we set our monitor arrangement to mirror, so that each panel displayed the same picture. If you don't have access to a \$10,000 monitor, you can plug a projector into your monitor port for an equally cool effect—try Epson's PowerLite 50c multimedia projector (\$3,299 SRP, www.epson.com). Finally, we plugged Klipsch's ProMedia 2.1 speakers into the audio port.

7. Software. The Candy Mac needed only one piece of software—Casady & Greene's SoundJam MP Plus. We chose the Thumper visual plug-in, but you can download a few others from the company's Web site. The Candy Mac was all ready to trip the night fantastic.



Casady & Greene's SoundJam MP Plus is the only software you need.

The Deal with Mac OS X

Mac OS X ran just fine on the Candy Mac, with the following caveat: We had to erase and then reformat our hard drive in Mac OS Extended Format. (Our original G3 had a Standard Format hard drive.) We simply chose Erase Disk from the Finder's Special menu, although that wiped out everything on our hard drive. Thank god we had those FireWire drives to make a backup.

Other Upgrade Options

1. Internal Hard Drive. You can put an extra IDE drive in the empty 3 1/2-inch bay. Be forewarned, though: This first-generation beige G3 will only support two IDE devices.

2. Memory. While Apple doesn't mention this, you can upgrade the memory in your beige G3 desktop to 768MB if you can find three 256MB low-profile DIMMs that fit into the slots. We found some at MemoryX (www.memoryx.net) for \$99 each.

MadMacs

Whether you're in a dystopian, postapocalyptic future or simply on a tight budget, there are times when the only way you can make your way in the world is by scavenging. Built on the scraps of the late Amelio era but infused with a few choice pieces of 21st-century technology, our doughty 9600 MadMacs packs a formidable punch. So why go the looting route? Well, the 9600 was one of the most expandable machines Apple ever designed. With six PCI slots, 12 DIMM slots, and four front-accessible drive bays, the 9600 took almost any upgrade we could find. And by pillaging defunct older machines from *MacAddict's* lab, we actually built our 9600 into an imposingly powerful system.

The Parts

Mach Carrier G3/400 upgrade card (\$359 SRP, XLR8)
152MB of RAM (approximately \$300 new)
3dfx Voodoo 1 (no longer available, about \$20 on eBay)
ProTV Stereo (\$139 SRP, Formac, www.formac.com)
SX serial card (only the SX Pro serial card is available now, \$179 SRP, Keyspan, www.keyspan.com)
OrangeLink FireWire-USB card (\$139 SRP, OrangeMicro, www.orangemicro.com)
Etherx PCI 10/100 Fast Ethernet adapter (\$26 SRP, Kingston Technology Company, www.kingston.com)
ExpressBus Plus (\$120 ESP, Belkin)
Matshita 8X SCSI CD-ROM drive (no longer available)
IBM 2GB SCSI hard drive (no longer available)



The Upgrade

1. Processor. These days, anything less than a G3 is a pathetic weakling that will quickly fall prey to stronger, better-armed machines. We used the XLR8 Mach Carrier G3/400 card, which provides unlimited upgrade potential—all we would have to do is replace the CPU in the upgrade card's ZIF socket with increasingly quicker ones.

2. RAM. The 9600 is the ultimate machine for the RAM scavenger—with 12 DIMM slots that accept FPM (Fast Page Mode) or 5V EDO (Extended Data Out) DIMMs, the 9600 can live well on the scraps of its dead brethren. Unfortunately, buying this RAM new is expensive—to fill the machine to its theoretical maximum of 1.5GB would cost an astonishing \$2,280 (more than the cost of a brand-new G4!). We opted to add 152MB of RAM.

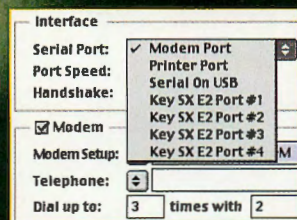
3. Storage and Expansion Bays. The 9600 has three half-height bays and one full-height 5 1/4-inch bay. We scrounged up a SCSI CD-ROM drive and a SCSI 2GB hard drive, giving MadMacs a grand total of 4GB of storage.

4. Expansion Cards. One of the few totally modern touches we added to MadMacs was a FireWire-USB card, enabling the machine to control any modern external peripheral. We also installed a Formac ProTV Stereo to let MadMacs constantly monitor television and FM radio for opportunities (computer shows, liquidations, etc.). To take full advantage of serial devices (Palms and older graphics tablets, to name a few), we added both a Keyspan SX serial card and a Belkin ExpressBus Plus, giving MadMacs a grand total of seven serial ports!

You can never have too many serial ports. OK, this may be too many—but how else could we dial into seven different bulletin-board systems at once?



One of these days we'll have to scrounge up a real antenna—our piece of steel cable just didn't cut it.

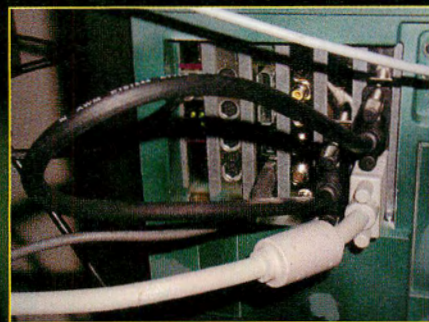


The Deal with Mac OS X

The Mac OS X installer simply refused to run. The problem is that the 9600 uses a substantially different motherboard from the beige G3s (the oldest supported machines), and OS X doesn't come with the necessary drivers for the older board.

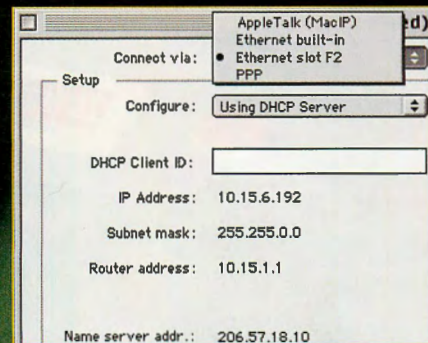
5. Graphics Cards.

We scavenged an obsolete 3dfx Voodoo I—while it's nothing special by modern standards, it vastly improves the capabilities of the even more obsolete ATI Mach 64 that came with the 9600. While a modern card would be better, it would also be expensive—and looters can't be choosy.



The Voodoo I can't handle 2D graphics by itself—we had to route our video signal from a 2D card through the Voodoo and then into the monitor.

6. Networking. The best we could do was throw in a 10/100Base-T card and hope for the best. Thankfully, Kingston is one of the few companies that sells cheap Ethernet adapters with Mac support. All we had to do was download the latest drivers from the Kingston site, and we were good to go.



That second Ethernet port is ten times faster than the built-in one—to heck with the motherboard!

7. The Externals. Using liberal amounts of hunter-green and sage-green spray paint and some brown acrylic paint, we camouflaged MadMacs so it could stalk ailing 7500s in search of additional RAM and PCI cards. We also added a toy rifle, painted black, for intimidating lesser machines into handing over their peripherals.

Other Upgrade Options

1. King-Size Hard Drive. Unless the terrifying postmodern world for which we built MadMacs actually materializes, 4GB is an absurdly small amount of storage space. Rather than use the 9600's internal Fast SCSI chain (which at 10MB per second is much slower than any modern interface), consider an external FireWire enclosure from a company such as MacAlly (www.macally.com) to house a cheap IDE drive.

2. Modern Graphics Card. In a few years the Rage 128 PCI video cards sitting in all those blue-and-white G3s—a vast improvement on our Voodoo 1—will be fair game for the scavenger who keeps a sharp lookout.

3. CD-RW, DVD-RAM, or DVD-R. Since we scrapped our floppy drive, we still have a free full-height bay. A good choice for this slot would be a removable storage device like a CD-RW, DVD-RAM, or DVD-R drive from Sony (www.sony.com) or LaCie (www.lacie.com). Unfortunately, since the 9600 doesn't have any IDE buses, most modern internal devices won't work—so you'll have to find an external FireWire device.



Vanity

Ten Ways

to Make Your Mac More Like You

Mac

What's the difference between us and the animals? Vanity plates, baby. And opposable thumbs, if you want to get technical. We humans feel the need to personalize everything from our cars (MIPORSH), to our butts (Sean and Nikki Forever), to our computers (see this article). And that's OK. Customization is a natural and healthy form of self-expression. What's *not* natural, however, is a hard drive that's still called *MacintoshHD*.

If you're still looking at the same prefab desktop, factory-default menu bars, and dull folder icons that came with your Mac, change them now and change them often. With the right tools and techniques, you can customize everything from desktop icons to startup pictures. And although these tips are geared toward Mac users running pre-Mac OS X system software, we haven't forgotten you early adopters. We've culled through the little that's out there for Mac OS X and found a few gems that will add a splash of personality to *your* new desktop as well. So take some inspiration from the exterior decorating tips in this article and transform your desktop from a sterile computing device into a warm extension of your inner self.

by Nikki Echler McDonald
illustration by Shag

1. Change Your Theme

You don't wear the same outfit every day (unless you're doing the kind of nine to five that involves lockdowns and license plates), so why should your Mac? For an instant desktop redesign, download Greg Landweber and Arlo Rose's cult classic, Kaleidoscope (\$20, www.kaleidoscope.net) and dress up your desktop in any number of crazy costumes. Kaleidoscope themes will completely change your Mac's look—if not your life—and we're talking from the desktop pattern down to the cursor. Head to the Kaleidoscope Web site and choose from a vast selection—or simply spend your next vacation designing one of your own. Right now, Kaleidoscope is compatible with Mac OS 7 through 9.1, although the Web site says an OS X version is in the works.

2. Turn Yourself into an Icon

Don't even bother to redecorate your desktop if you aren't planning on doing something with all of those drab folder icons. You wouldn't give your house a fresh coat of paint and ignore the trim, would ya? Didn't think so.

The best way to make your Mac feel like home is to litter yourself, your friends, your family, or your pets all over the desktop. You can use a number of icon editors to draw or edit your own, including ResEdit (free, download from www.resexcellence.com), Ksoft's CP_IconEdit (\$20, www.ksoft.net), and Craig Hockenberry's IconBuilder (\$29 for Lite version, \$69 for Pro version, www.iconfactory.com), a Photoshop filter. That said, we went with David Catmull's easy Icon Machine (\$25, www.uncommonplace.com), which gives you all the necessary editing tools to create beautiful icons and doesn't require that you dirty your hands mucking with ResEdit.

The less-motivated computer redecorator can skip the do-it-yourself projects by using premade icons, of which there are many. IconFactory (www.iconfactory.com), the one-stop shop for everything icon related, has links to all kinds of icons, including fish, faces, and funky folders. Check out the action and tell them *MacAddict* sent you, and you'll get absolutely no special treatment whatsoever.

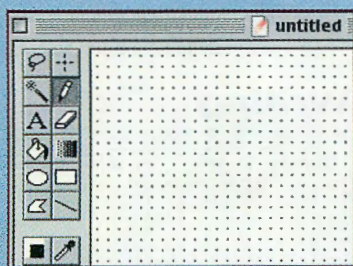
Make Your Own Icon

Making icons is easy. If you can hold a pencil in your hand, you can draw an icon of just about anything you want. Making *good* icons, however, is considerably more difficult. We'll show you how we made an icon of our personality-laden cat, Speak, using Icon Machine.

Step 1. Open Icon Machine and select New Icon from the File menu to open the program's editing window. The tools in the palette on the left look and act similarly to tools you've probably seen in other artsy programs.

If you know how to work a pencil, you should be right at home here.

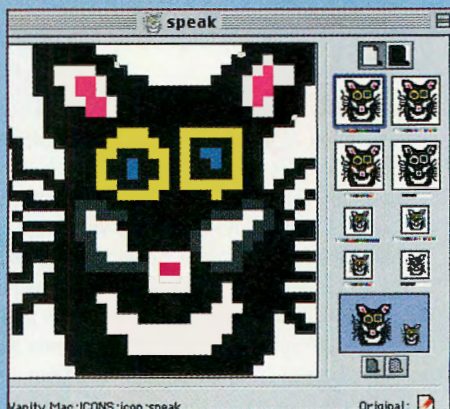
Step 2. Grab the pencil and start drawing. You'll see your progress reflected in the small box on the upper-right side (showing a 32-bit icon preview) and in the somewhat larger box in the lower right (a preview of how your icon will look against your desktop background). You can draw using Apple's recommended icon colors; the standard set of 256 colors; or black and white.



Sure, Speak is black and white, but every icon can use a little color.

Step 3. When you're done drawing, you need to create the icon resources that allow your system to use your image. Do this by dragging the image in the 32-bit icon preview onto all of the other empty boxes on the right.

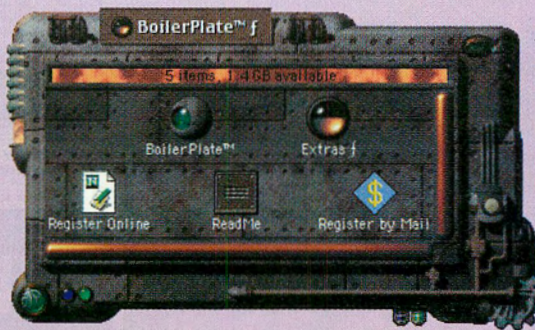
Just drag and drop to give your art the resources it needs to become an icon.



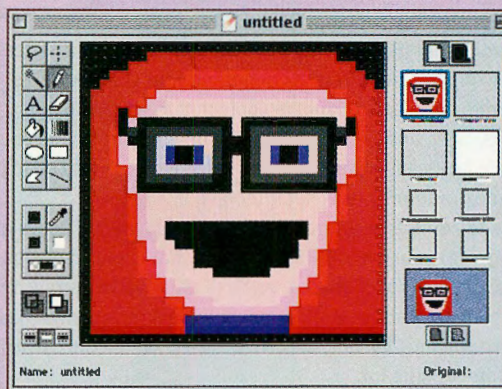
Step 4. Assign your icon active desktop duty by selecting Apply Icon To from the File menu, then choosing the folder where you want your new icon to appear.

File		
New Icon	⌘N	
Open...	⌘O	
Close	⌘W	
Save	⌘S	
Save As...	⇧⌘S	
Apply Icon To...		
Revert		
Quit	⌘Q	

You'll never become a great icon if you don't apply yourself!



You know how Linda Tripp looks now, as opposed to how she looked when she was hanging out with Monica? Well, you can get similarly dramatic makeovers for your Mac by simply using Kaleidoscope.



Guess who that is? Don't wait for fate. Turn yourself into an icon using Icon Machine.

TIP As If You Didn't Know: To replace an icon, click it and select Get Info from the File Menu. In the General Information Box, select the icon and paste in a replacement icon.



3. Get a New View

You might not have a room with a view, but you can change your scenery to suit your mood by replacing your desktop pattern with a photo, drawing, or pattern (of course, for the really vain, a flatteringly Photoshopped picture of yourself is the way to go). To change your desktop picture from within the Mac OS itself, just go to the Appearance control panel, click the Desktop tab, select Place Picture, and pick the picture you want. You can even drag a folder full of images onto the Appearance control panel's desktop-picture controls, and your Mac will randomly pick a background image every time you restart.

For more control over the process, Peirce Software's DeskPicture control panel (\$20, www.peircesw.com) provides a faster route to swapping images and offers editing tools your OS lacks. This down-and-dirty editor comes with simple tools that let you crop and resize PICTs, JPEGs, GIFs, and EPS and PhotoCD images directly on your desktop. If your life lacks adventure, you can set the program to change your desktop photos randomly or at set intervals.

Tons of great sites offer free photos that you can download as wallpaper if you don't have any of your own. We're guessing that if you want a good underwater photo of a school of sharks, you'll likely have to borrow one. A few places to try include MacDesktops (www.macdesktops.com), PixelPoke (www.pixelpoke.com), and DeskPicture (www.deskpicture.com), which has that shark pic you're looking for.

4. Give Yourself a Big Hello

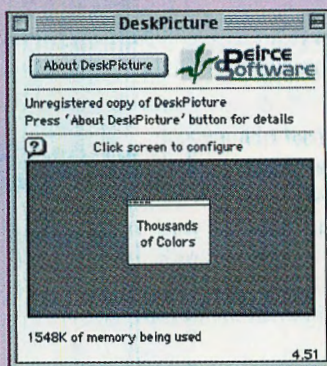
Only God, Steve Jobs, and a team of Apple engineers can change your Mac's startup tune, but you can add a personal greeting to the routine of booting up with little effort. First, select the Sound control panel from the Apple menu (for pre-OS 9 systems, this is the Monitors And Sound control panel). Make sure you have the right input source selected (a built-in or external mike), then select the Alerts icon. Once you've done that, record a greeting—just click New Sound and record yourself saying something like, "Hello, Nikki! You're wonderful!" Your recorded sound will appear along with Sosumi and Glass in your Alert Sounds list. Close that window, then open the System file inside the System Folder to find the sound you've just created. Drag it into your Startup Items folder, then restart your Mac to get a little self-love.

5. Put Everything into Your Own Writing

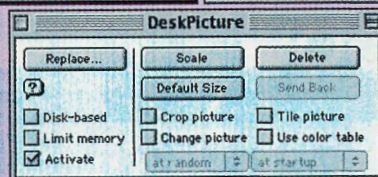
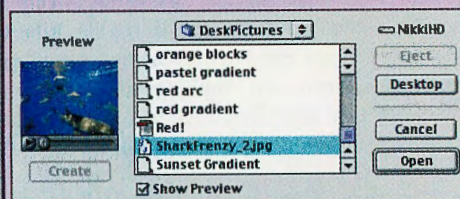
Anyone who has ever received an old-fashioned letter in the mail knows how much more personal a handwritten message feels than a cold, typed email. You can give your desktop that signature touch by creating and using a font in your own handwriting.

Making a font isn't easy, however. It takes time, patience, and a few pricey programs, namely Adobe Streamline, Illustrator, and Photoshop (\$122, \$399, and \$609 respectively, www.adobe.com), as well as Macromedia Fontographer (\$349, www.macromedia.com). Why so many programs? Well, it's best to draw your letters first, then scan them using Streamline, touch them up in Photoshop, save them into Fontographer using Illustrator as a Clipboard of sorts, and then create the actual font in Fontographer. Sure, you can do everything with Fontographer, but it is much harder and probably wouldn't look all that great. If you've got the tools and the time, check out Chank Diesel's tutorial at www.chank.com for a step-by-step how-to on creating fonts from scratch. The only other commercial font editor available for the Mac is Pyrus's FontLab (\$399, www.pyrus.com). Again, you can use it as a stand-alone, but you may not be happy with the results.

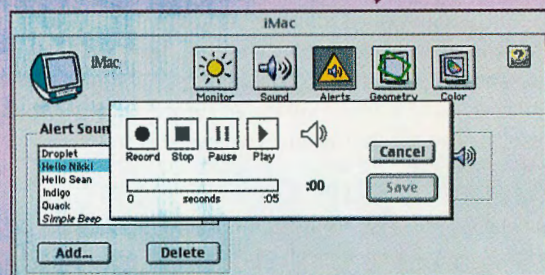
If you don't have the tools or the time to write your own font, you can always pay someone to fake your signature—take a look at Alexander Walter (\$99, www.walterware.com) or Chad Johnson (\$50 print font, \$75 cursive font, www.pernet.net/~chadly1/fonts/fonts.html).



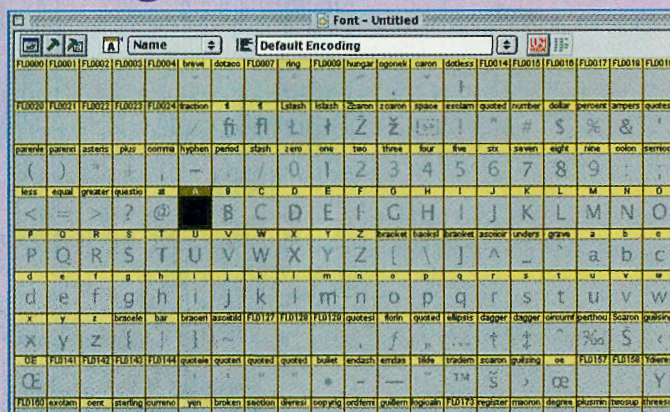
Configuring DeskPicture to match your screen's resolution calls up a dialog box that lets you add a picture. Pick a picture from anywhere on your desktop, then just edit and replace.



"WOOF!"



You wanna go where everybody knows your name? Would you settle for a warm hello from your Mac?



You can turn your handwriting into a font using Pyrus's FontLab.

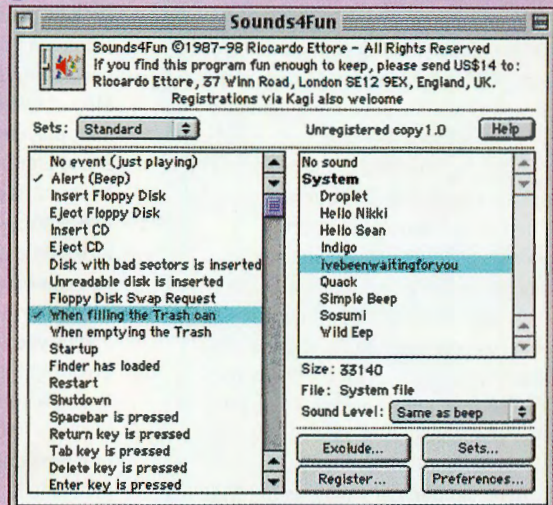
TIP As If You Didn't Know: To change the font your system uses to display lists and icon names, go to the Appearance control panel and select the Views Font of your choice. You'll need to contact a third party such as Weedhopper Press's AppearanceHopper 1.9.1 (\$9, www.whpress.com) to change any other system fonts to a specialized font.

6. Make Every Sound Mean Something

Each time you empty the Trash, delete junk you no longer need, or simply press the spacebar, you can make it a special occasion, complete with its own soundtrack. Riccardo Ettore's Sounds4Fun control panel (\$14, www.hebel.net/~retto) lets you attach sounds to almost any action you can commit with your keyboard. Stock your system file with sounds, then use Sounds4Fun to select an action and match it to the sound of your choice. You can also use Sounds4Fun to set personalized audio cues that let you know when your Finder is finally done loading, when a massive copy job ends, and when you've got Caps Lock on. For a new supply of sounds, use the method we describe in "Give Yourself a Big Hello," p36, to create your own, or download them from the Web (for instance, try www.geocities.com/Vienna/7018/alerts.html).

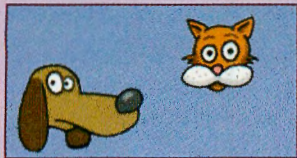
Yo! The Alert Sound Randomizer from ClixSounds (\$20 download, \$29.95 CD-ROM, www.clixsounds.com) is similar to Sounds4Fun in that it lets you create and set alert sounds. However, if you buy the CD-ROM version of the program, you also get more than 1,000 prerecorded sounds to play with.

Do you hear something? Get your Mac to talk back by assigning sounds to every event using Sounds4Fun.



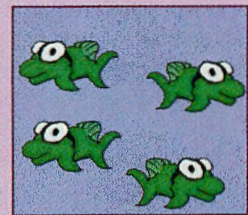
7. Give Your Desktop the Gift of Life

OK, so your computer greets you personally and your Trash calmly thanks you every time you throw something away, but despite these personal touches, your little house doesn't feel quite like a home. The solution? Get a pet!



They bark, they meow, they belch. Stimpsoft's Cat.app and Dog.app are figureheads with attitude.

True caregivers will love BrightChick (\$10, www.kagi.com/mushroomsoftware), a virtual baby chick that you must feed, water, pet, and play with just to keep it clucking. The little chickadee takes up almost no space and is adorably addictive. However, if you're looking to adopt a lower-maintenance pet, download StimpSoft's Cat.app 2.8 or Dog.app 2.1 (free, www.stimpsoft.com). The disembodied dog and cat heads bark, purr, and occasionally belch. For those of you who are neither dog, nor cat, nor chick people, there's always the MacFishTank (free, www.wildcatsw.com). Goofy green fish take over your desktop and turn it into a cartoon aquarium.



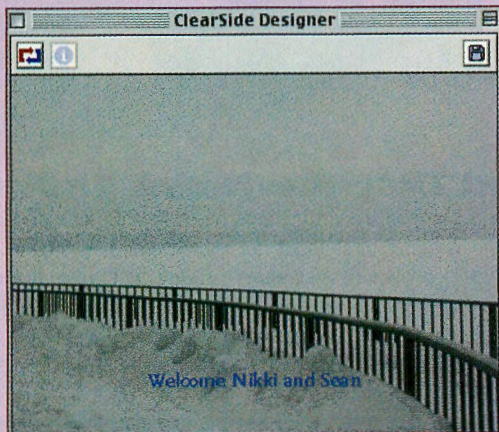
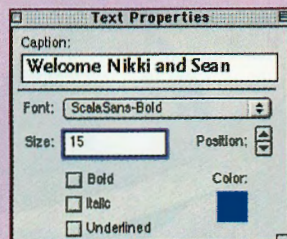
Wild Cat Software's MacFishTank is fabulously fishy freeware.

8. Lose That Smirky Startup Screen

Like most Mac users, you probably have a ton of mysterious extensions that take forever to load, forcing you to spend more time staring at that crooked, smirking Mac startup screen than you spend with your own wife or husband. Don't put up with it—change it! You can create your own startup screen with a personalized welcome message using Azine Software's ClearSide 2.0.1 (\$10, azinesw.macos.net).

All you do is select Designer from the File menu, paste your image directly onto the template, type a short message, and then save changes when you quit. The next time you start up, you'll be looking at a piece of your own work.

If you'd rather download some predesigned startup screens, ResExcellence has an extensive collection. Of course, if you go that route, you must be prepared to edit your System file with ResEdit—a potentially hazardous occupation. Still, if you're willing to face the risk, the actual hack is pretty simple. (For more information on how to do this, see "Hack Your Mac," Apr/00, p30.)



Azine Software's bare-bones ClearSide editor lets you create a new startup screen using your own words and pictures.

Mac OS X Users, Over Here!

We didn't forget about you. There just weren't a whole lot of desktop-decorating tools out there for Mac OS X as of press time. But don't despair—eager shareware developers are working right now to bring you icon editors, funky backgrounds, and kooky accessories to personalize your new operating system. In the meantime, try on one of these for size:

1. MenuStrip 1.5 (\$12, www.MacPowerUser.com) enables you to adjust high-traffic settings such as volume and resolution quickly without leaving the menu bar at the top of your screen.

2. Iconographer (\$15, www.mscape.com) allows you to edit icons for Mac OS X—as well as earlier operating systems. It doesn't, however, run natively in the new OS—not yet.

3. Forest (\$10 for 6 worlds, \$19.95 for 15 worlds, www.macunicorn.com) lets you relax to the soothing sounds of nature in different worlds, replicating outdoor environments that range from the rustling of trees to the crashing thunder of a summer storm.

4. NekoOnDesktop 0.91 (free, www.lisai.net/~hamada/Acti/MacOSX) lets you raise a litter of one to five desktop kitties who frolic, sleep, and get sick all over your screen.



You don't even have to scoop kitty litter for your Neko cats.

Serenity Now!

You can base your desktop décor on anything from your favorite color to an uncontrollable sushi fixation, but if you want to create a motif that's simultaneously soothing and productive, consider using feng shui design principles. This ancient Chinese philosophy of creating harmony through the balance of energy, or chi, offers guidelines for decorating homes and offices so as to promote health, fortune, and happiness. You can do the same for your Mac by following these five feng shui principles.

1. Don't let bad chi sneak up behind you. If you can, set up your computer so you're facing the door or looking outward. If you're stuck staring at the walls, attach a mirror to the wall or to your computer so you can see any trouble that might be coming.

2. Keep your working area and your desktop clean. Clutter prevents the movement of energy and can block your chi. If you're in a rut, this may be why. Throw away all of those Post-it Notes junking up your monitor and keep track of to-dos digitally. You'll find an assortment of great shareware organizers at TUCOWS (www.tucows.com), a fully stocked shareware library with an incredible Mac section.

3. Throw out the old to make way for the new. Get rid of old programs, files, and folders. Feng shui followers believe cleaning house makes space for new opportunities you might not even know exist.

4. Choose your desktop colors wisely. Red and gold (yes, a dark yellow would suffice) used together are supposedly very lucky; green brings prosperity; blue inspires tranquility; and too much black, not surprisingly, can leave you feeling, well, depressed.

5. Keep it simple. Too many conflicting design elements will distract and unsettle you. Flashy icons, talking Trash Cans, and crazy Kaleidoscope schemes can create a battle of energy that leaves you exhausted.

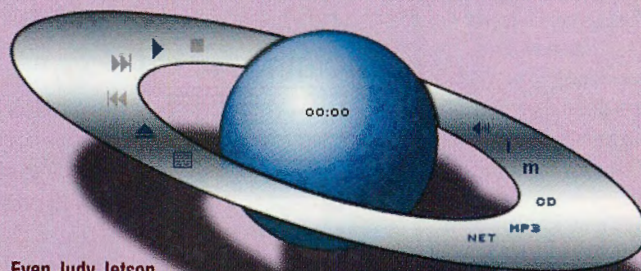
9. Treat Your MP3 Player to a "Face" Lift

Odds are good that if you breathe air, live on the planet Earth, and use a computer, you've also downloaded an MP3 or two during your lifetime. While there are a ton of MP3 players, Panic's Audion 2.1 (\$19.95 for player only, \$32.95 for player and encoder, www.panic.com) is the best marriage of fashion and function. Sure, iTunes (www.apple.com) is free, but you can't change how it looks unless you're handy with ResEdit, and even then you can only do so much. While Casady & Greene's SoundJam MP Plus player (\$39.95, www.soundjam.com) allows you to swap in new skins, many of them are downright ugly.

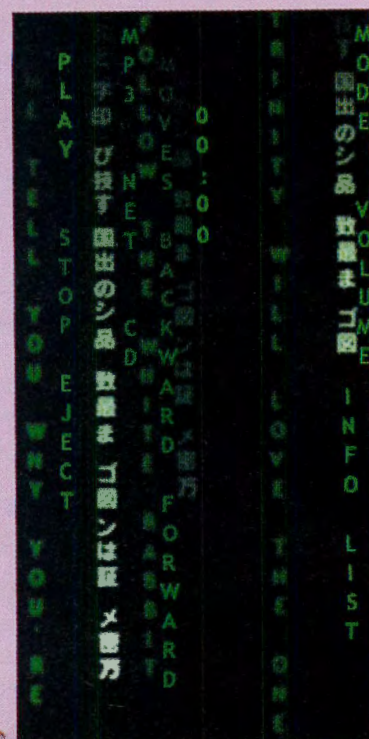
Truly superficial types will go nuts over Audion's ability to swap "faces" faster than Hannibal Lecter in the midst of a breakout. Just hit Panic's Web site and download a premade face, or locate the link to the Audion Faces eGroup, a support group of sorts that will help you construct your own face. Also, as of press time, Panic had a public-release version of Audion 2.1 for Mac OS X. And, according to the guys at Panic, future versions of Audion (which may be out by the time you read this) will feature a face editor that allows you to create the art in Photoshop (instead of having to mess with ResEdit).



No ifs, ands, or oinks about it—Audion's pig face makes for a clever disguise.



Even Judy Jetson would be jealous of this space-age face.



The matrix is real, Neo, and we're using it to play our favorite MP3s!



An apple a day keeps your MP3 player chugging away.

10. Read Only the News That's News to You

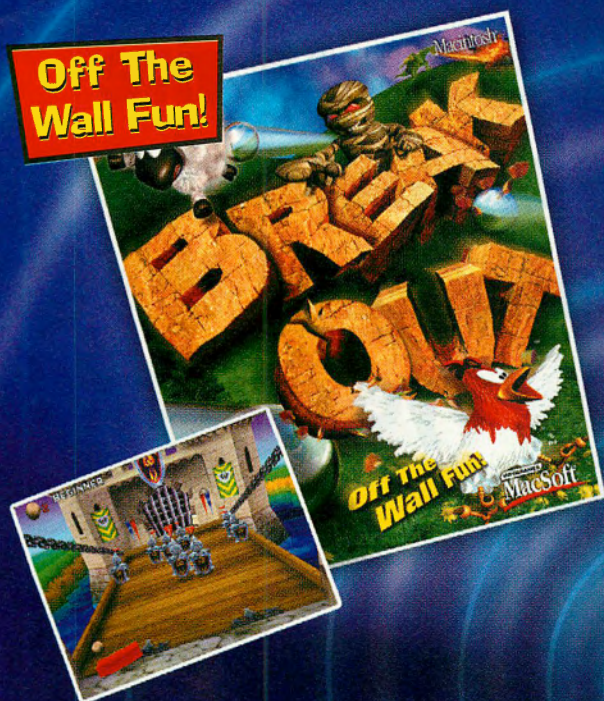
You can turn your desktop into a virtual news network programmed to meet your specific interests with the help of Aladdin Systems' IntelliNews (\$20, www.aladdinsys.com). IntelliNews installs a movable strip that you can dock anywhere onscreen, featuring customizable channels that include headlines, stocks, sports, weather, and movies—all of which you can set to update as often as every 15 seconds. You can use IntelliNews to track stocks, scrounge up headlines from your favorite news sites, deliver local weather updates, and tell you when the new Steven Soderbergh flick is playing at your local theater. It's all about *you*, baby.



IntelliNews' strip of searchable channels gives you only news you can use, and takes up hardly any space to boot.

They're Back And Better Than Ever!

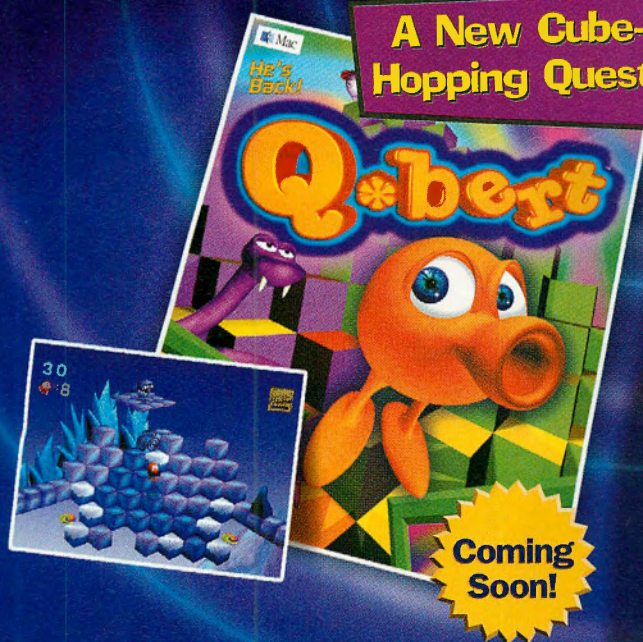
Off The Wall Fun!



The Bugs Are Back!



A New Cube-Hopping Quest!



Coming Soon!

It's Back!



The Next Level!

All new gameplay. Twice the fun.

(Big Hair Optional)



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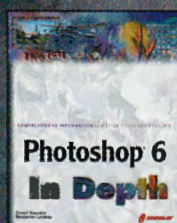
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The Handspring Wilderness Handbook

Lost in the great outdoors?
A Visor might save your life.

by Jack Miller



What sets the Handspring Visor apart from other PDAs is its Springboard expansion slot, that magical little gateway into the world of truly versatile handheld computing. You know the drill; just pop in a module, and presto—your organizer is now a digital camera, or a mobile phone, or a tactical nuclear device. That's the hype, anyway.

To put the vaunted Springboard architecture through its paces, *MacAddict* devised the ultimate test: send an unsuspecting writer into the frozen New England wilderness in the middle of winter armed with nothing but the barest human essentials, a Handspring Visor Prism (\$449, www.handspring.com), and a slew of add-ons carefully chosen to maximize the chances of survival.

In its hunt for the perfect survivor, *MacAddict* somehow settled on me—a certified couch potato with no sense of direction who generally regards nature as that stuff on public television where a big cat turns a gazelle into a Snak Pak. I guess if I can use a Visor to survive in the woods, anyone can. The journal entries on the following pages document the harrowing tale of what transpired when nature, technology, and the outdoors-challenged collided.

The Survival Utility Belt

Here's a breakdown of the survival gear we assembled for this death-defying trip into the heart of darkness:

eyemodule digital camera (\$129.95, www.eyemodule.com). Turns any Visor into a digital camera capable of capturing full-color 320-by-240-pixel images. (The *eyemodule2* is now available with 640 by 480 support and the

ability to record movies.) This is what I used to visually document my journey.

Geode GPS module (\$289, www.geodiscovery.com). Digital map with a live, constantly updated "You are here" marker.



Minijam MP3 module with 64MB multimedia card (\$259, www.innogear.com). Freezing to death in a snowdrift? An hour's worth of tunes helps dull the pain.

OmniSky Minstrel S wireless modem and service (\$299, \$39.95 per month, www.omnisky.com). Stay tethered to the Net even when there's no phone line around.

Backup module (\$39.95, www.handspring.com). Backs up and restores your Visor info in minutes with a mere tap of the stylus.

Pocket Express Entertainment Pack (\$39.99, www.pocketexpress.com). Eight games to keep your mind off your impending demise, including Tetris Classic and Lode Runner: The Legend Returns. Now *that's* survival gear!

The Battleground

What sort of wilderness should I tackle? A slightly more outdoorsy type might opt for the challenge of a weeklong naked and barefoot charge up Mount Everest with nothing but a hunting knife and a length of string. I, on the other hand, rarely venture out in daylight unless I'm out of coffee or the house is on fire. Also, I frequently get lost trying to find the upstairs bathroom. As such, I decided to face my own mortality by plunging headlong into...*the woods across the street from my house!*

Hey, come on, they're spooky! I've lived in this place for a year and a half now, and I haven't set foot in those woods *once*. On top of that, any forest outing during a New England winter bears the potential for frostbite, hypothermia, and ensuing hilarity. So show a little respect.

The Journey Begins

10:15 a.m. Time for last-minute preparations. Springboard modules, check; strawberry-flavored rations, check; mortal fear of the unknown, check. With one tap I back up my Visor to the Backup Module and bid farewell to my loving fiancée, Katie.



10:45 a.m. Here it is: the menacing shade of our local forest preserve. Will I emerge as a ruddy mountain man at one with the natural world, or will wild skunks drench me in the foul stench of defeat before tearing the flesh from my bones? Only time will tell.

The point of no return.



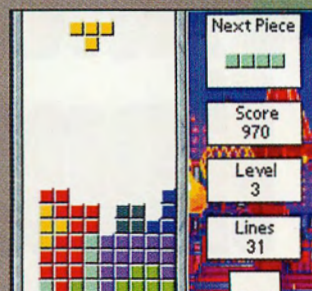
Nature, schnature. It's high-score time.

It's All Fun until Someone Loses an Eye

11:15 a.m. Bored. Concluding that Thoreau was far too easily amused, I bust out the survival gear for a quick entertainment fix. I snap the Entertainment Pack into the Springboard slot and attempt to attach the GameFace. Catastrophe! It's the non-Prism version! Lode Runner without a joystick? Clearly this is what campers mean when they talk about "roughing it."

12:15 p.m. My carpal tunnels bear evidence that the Visor's buttons aren't ergonomically designed for game use. An extended Tetris session in subfreezing weather may have been unwise.

Tetris makes everything okay—until it makes things worse.



12:25 p.m. The pain worsens. I seem to recall hearing something about aspirin deriving from some form of tree bark; should I gnaw on a tree until the pain in my wrists subsides? A quick check in the Medical Letter Handbook of Adverse Drug Interactions reveals that mixing baby aspirin and cocaine can lead to fetal renal failure, but I'm neither pregnant nor a cokehead, so I go for it. Now, let's see—which of these trees looks most like aspirin?

12:40 p.m. Helpful hint: If you're going to gnaw on a tree, make sure you've got some dental floss handy for all those splinters. Wrists feel a little better, though.

Two words: Needs salt.



Hungry Like the Wolf

1:15 p.m. This strenuous bout of game-playing and tree-chewing has given me a rumble in my tumbly. I prepare for a Twizzlers sugar boost but am beset by the ultimate disaster: They're stale! What to do? These Twizzlers are all I have to keep me from turning into a one-man Donner Party. It may be time to turn to the Net for help.

1:30 p.m. I set up the OmniSky wireless module, and I'm now surfing the Web with Bluelark's Blazer browser (free, www.bluelark.com). Maybe the best course of action is to get directions back home, where I can raid the fridge. Unfortunately, Pocket MapBlast is refusing to give me any directions from my current location. I also can't seem to get my favorite online pizza site to deliver to "the woods across the street from my house." Color me baffled.

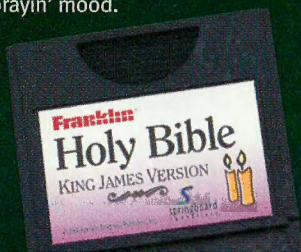


Gee, it's usually so helpful!

Merriam-Webster Dictionary (\$49.95, www.franklin.com). Because there's never an excuse for poor spelling.

The Medical Letter Handbook of Adverse Drug Interactions (\$99.95, www.franklin.com). Crucial for looking up the potential side effects of mixing cough syrup and trail mix.

Holy Bible (King James Version) (\$39.95, www.franklin.com). When you lose all feeling in your extremities, you may wind up in a prayin' mood.



To bolster our player's chances of survival even further, we tossed in these non-Springboard gadgets:

A 5-pound tub of Twizzlers Strawberry Twists (\$14.95, www.hersheys.com). With all these fun toys, it's easy to forget rations, but you've got to eat! I opted for a staple of the "red candy" food group.

Stowaway portable fold-up keyboard (\$99.99, www.targus.com). Typing in the cold isn't the best fun, but it's easier than using Graffiti with a stylus clutched in your frostbitten hand.



GameFace (\$39.99, www.handspring.com). Clever snap-on doohickey turns the Visor's buttons into a joystick.

1:50 p.m. Desperate times, desperate measures. I email Katie and ask her to bring me a sandwich. (She has a much better sense of direction than I do.) Upon delivery, she offers to lead me the hundred-odd feet back to our front door. Between bites of vegan phony baloney on whole wheat, I politely decline, committed to survive on my own, no matter how many times she'll have to bring me food.

2:10 p.m. Katie leaves in a huff. Says she's unplugging her iMac from the cable modem, so I shouldn't bother trying to instant-message her for a burrito when dinnertime rolls around. My one link with civilization, severed. I have never felt so alone.



Was it something I said?

I'm My Own Best Friend

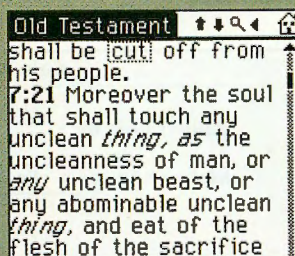
2:30 p.m. At first my isolation induces mild panic, but now I am embracing the hermit lifestyle with gusto. Just me and my Visor, chillin' to some tunes on the Minijam; a little death metal always lifts my spirits. As I type this entry into the WordSmith word processor (\$39.95, www.bluenomad.com), the soothing sounds of Deicide lull me into a Zen state. (This Stowaway keyboard is a godsend, by the way.)



Just the thing to lift the spirits.

4:35 p.m. My newfound take on solitude is bolstered by hours of tramping through trees and never finding anything but more trees. At least the Merriam-Webster Dictionary reveals that I'm using the word *bolstered* correctly.

5:00 p.m. I've accepted that I'll never see asphalt again, so I'm warming to the idea of living in the woods for the rest of my life. I turn to the Bible for spiritual support. A simple search for the phrase "lost in the woods" turns up over 50 results, but none seems particularly relevant.



The Good Book, searchable and everything.

5:05 p.m. Battery pack running low. Oh, yeah...power. Funny how little things like that can slip one's mind.

You Are Here

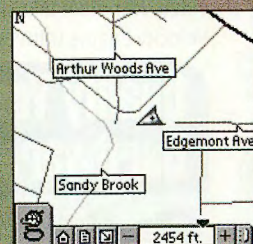
5:10 p.m. It's getting dark, and once power runs out, I'll be badger food for sure—plus I think I'm being stalked by primordial evil. If I want to get out of the woods alive, I'll have to bring out the Big Gun: the GPS device.

"Oh, this *can't* be good..."



5:30 p.m. Before departing on this life-threatening plunge into the primeval forest, I had the foresight to visit GeoDiscovery's Web site and install the relevant map file on my Visor. I now snap in the Geode and follow its friendly set of onscreen instructions.

5:40 p.m. Success! A map! A small triangle represents me onscreen, turning when I do and creeping forward when I walk. The me-triangle moves through a vast expanse of nothingness, since no streets run through the woods. Tapping a line outside this area reveals a street name, and it doesn't take long to figure out which street is mine.



It's kinda like playing *Asteroids*.

5:50 p.m. I turn until the triangle points toward my street. I walk forward, smashing into a couple dozen trees before I emerge from the wilderness, battered, hungry, and splintery-gummed—but alive. *Alive!*

Epilogue

I've since recovered from my ordeal (following an intensive therapeutic intake of frozen burritos and the Fox network's life-restoring programming), and now realize just how much I took civilization for granted. I certainly don't plan to rough it again anytime soon, but at least I proved that even the most anti-Thoreauvian among us can survive outdoors with the right technology.



Recovering nicely, thank you.

reviews

Rants, raves, and some Freakin' As...

Final Cut Pro 2.0

multimedia

Company: Apple Computer

Contact: 800-692-7753, www.apple.com/finalcutpro

Price: \$999 SRP, \$249 upgrade

Requirements: 300MHz Power Mac G3 or faster (Beige G3s not supported), Mac OS 9.1 (no Mac OS X support), 192MB RAM, 20MB free hard drive space, QuickTime 5 or later

Recommendations: Large-screen monitor, high-performance SCSI media drive, Matrox RTMac or other real-time processing board, DV camera with Firewire I/O



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SPIFFY
A solid offering. Overall a good investment.



YEAH, WHATEVER
Neither recommended nor rejected. Some might like this, but we weren't impressed.



BLEEH!
Give us back the time we spent testing this.

Final Cut Pro, Apple's pro-level video-editing software, was a hit when it debuted in 1999. Compact and elegantly designed, it replaced many high-priced Avid turnkey systems in Mac-based editing suites. However, what Final Cut Pro lacked was speed. Unlike Media 100 or Avid systems, Final Cut Pro had no hardware component to provide real-time rendering of video. Nor did it take advantage of the G4's Velocity Engine (AltiVec) or earlier

Quality Your Hardware

Before buying into a Final Cut Pro 2.0 editing setup, check www.apple.com/finalcutpro/qualification.html for Apple's current hardware compatibility list. As of press time, Final Cut Pro 2.0 was qualified to work only with the following video I/O hardware:

- Aurora Video Systems Igniter Studio (www.auroravideosys.com)
- Digital Voodoo D1 Desktop 64AV (8- and 10-bit versions, www.digitalvoodoo.net)
- Pinnacle Systems Targa CinéWave
- Matrox RTMac

Check the list for DV camcorders, too. Several manufacturers, notably JVC, don't make the cut. Note that you will need to install special plug-ins for some popular Canon DV models, such as the GL1 and Optura Pi. You will find the plug-ins in the Extras folder on your Final Cut Pro 2.0 disc.

multiprocessor Macs. So you'd rip through the editing process and then watch your clients twiddle their thumbs while the final render bar crawled along.

No longer. In Final Cut Pro 2.0, Apple has solved the sluggishness problem with a transparent real-time QuickTime architecture. Install an optional real-time video-processing card—such as Matrox's RTMac (\$995, www.matrox.com) or Pinnacle's forthcoming real-time version of CinéWave (www.pinnaclesys.com)—and Final Cut Pro 2 will fly through video jobs that used to take hours.

We put Final Cut Pro 2.0 through its paces on both a stock Power Mac G4/400 and a new dual-processor Power Mac G4/533 with an installed Matrox card. With the Matrox card, cutting DV, rendering stock transitions, and compositing three video layers happened instantaneously. You can view and output camera moves, cropping, scaling, and shadow effects, all of which previously took minutes or hours to render, without the lengthy rendering process.

Final Cut Pro 2.0, now optimized for AltiVec, also ran faster than its version 1.2



The new audio peak meter includes a clipping indicator that alerts you if your audio exceeds standard decibel levels.



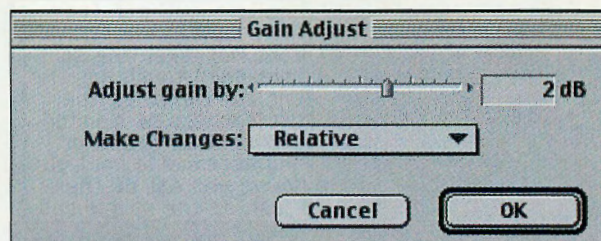
Though it retains an elegant gray interface, Final Cut Pro 2.0 now does real-time rendering and has many new features. (Anime by Jason Hopkins.)

on our bare-bones G4/400. The whole app felt snappier, and we saw a significant speed gain—about 25 percent—when we rendered the same project in both versions.

There are scores of improvement tweaks throughout the app. For example, you can set parameter defaults (resolution, frame rate, and so on) when you install Final Cut Pro 2.0, or use the all-in-one Easy Setup dialog box to change default settings later on, instead of entering basic parameters in several different windows. You can also save and trade settings files—an important feature if you routinely edit media from dissimilar sources or work with other editors and want to ensure that everyone is using the same settings.

Organizing clips is more intuitive using the new Media Manager. Version 2.0 seeks out and reconnects media files with a Find button in the Reconnect Options dialog box, making it hassle free to find and relink missing clips and files. You also have more ways to tag, flag, and annotate clips for customized tracking. Too bad Final Cut Pro still doesn't organize Capture Scratch files properly—it dumps them into a new folder with each capture session, rather than allowing you to specify a single Capture Scratch folder for each project.

Apple was smart in building compositing and keyframing capabilities into Final Cut



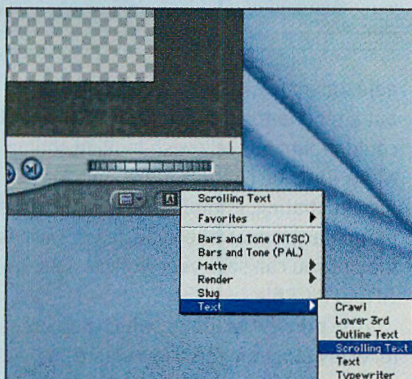
A nice audio improvement—adjust the gain on any range of audio clips by setting the relative dB change in the Gain Adjust dialog box.

Pro, negating the need to launch Adobe After Effects for daily tasks like adding or multiplying layers, superimposing flying titles, or creating a basic matte. The improved keyframing tools have more options for numeric input, allowing you to move, scale,

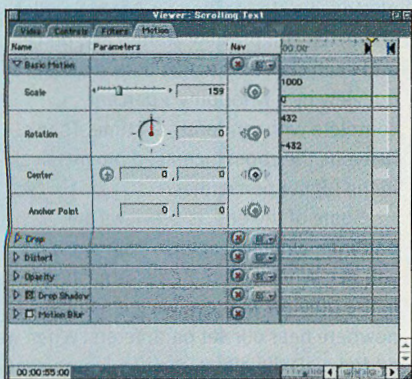
and spin any clip and generate motion blur. The text generator, formerly one of the weaker features, boasts a new, high-quality outlined text generator with animatable attributes like opacity and edge softness, plus new Scrolling, Crawl, and Typewriter text-motion generators.

Roll the Credits

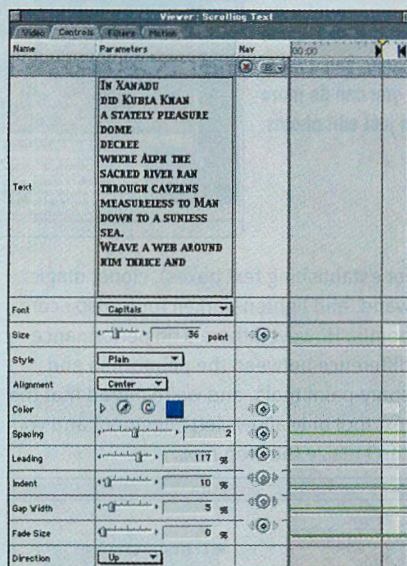
Final Cut Pro 2's title generators are a big improvement over version 1.2's. You can now create high-quality outline text or make your text scroll, crawl, or appear letter by letter as if someone were typing it on a typewriter. Here's how.



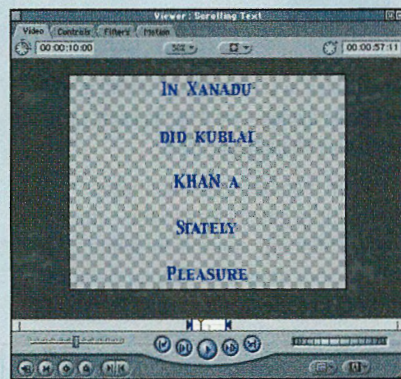
1 Click the generators button (the film frame marked with an A) in the Viewer window, and choose Text, then Scrolling Text from the subsequent pop-up menus to open the Scrolling Text generator.



3 Click the Motion tab to set motion parameters, add drop shadows, and specify other features and edits to your text if desired.



2 Click the Controls tab to set the parameters for your type (font, size, and so on). When typing, keep text within the safe title area to ensure that your text remains visible in the frame.



4 Click the Video tab to preview the effect in the Viewer. Your text should scroll upward smoothly and is now ready for adding over your video.

Final Cut Pro 2 ships with lots of effects filters and satellite apps, including Commotion DV (a subset of Pinnacle's roto-and-paint heavyweight, Commotion 3), Maxon's Cinema 4D GO (a light 3D version of Cinema 4D XL that creates flying 3D logos), Boris Script LTD (a plug-in character generator that expands Final Cut Pro 2's own titling tools), and Terran's Cleaner 5 EZ (for compression). Most of these are minimally useful, so save your paycheck for the full versions. Final Cut Pro 2 also supports most After Effects filters.

While Final Cut Pro 1.x's audio tools weren't in the same league as its video tools, version 2.0 fixes past problems (for example, with setting relative gain for selected clips or an entire track) and resolves a number of other shortcomings. However, Apple still has more work to do. For example, the colorful new peak meter gives better feedback on the master stereo audio level, but we'd prefer to see a peak meter for as many individual tracks as we liked. Fortunately, Apple has improved compatibility with external solutions for audio work. You can output Final Cut Pro 2.0 audio tracks in OMF (Open Media Framework) format for import into Digidesign's ProTools for audio postproduction or use Bias's Peak DV (included), which supports VST plug-ins.

A few other beefs: We experienced a couple of crashes while rendering with the dual-processor G4/533; whether this is a real Final Cut Pro issue, a problem with QuickTime 5, or some issue with the multiprocessing code, we're not sure—but this is a point-zero release, after all. Also, Final Cut Pro 2.0 is not Mac OS X compatible—meaning you can't even run it in the Classic environment. Apple promises an OS X upgrade, but didn't announce a target date as of press time.

Version 2 solidifies Final Cut Pro's position as the leading video-editing solution for the Mac. If you edit for a living with Final Cut Pro, upgrade and buy into an RT hardware solution. You'll recoup your investment in no time.

—Steve and Raf Anzovin

good news: Smooth editing environment. Speed gain. Real-time processing with compatible hardware.
bad news: Not compatible with Mac OS X. Some stability issues.



fun & games

HEROES III COMPLETE P51
MONOPOLY CASINO P52
ESCAPE FROM MONKEY ISLAND P54
GAMEROOM P56

design & graphics

PHOTOSTUDIO 4.0 P46

multimedia

FINAL CUT PRO 2.0 P44
SONICFIRE PRO 2.0 P53

hardware

DAZZLE HOLLYWOOD DV-BRIDGE P48
FORMAC STUDIO P48
POWERR DIRECTOR'S CUT P48
APPLE IMAC SPECIAL EDITION P50
FORMAC FIREWIRE CD-RW P57
RIO 800 P58

BELKIN FIREWIRE 6-PORT HUB P59
AURORA IGNITER P60
SONY DIGITAL RELAY P61
OLYMPUS BRIO D-100 P62

utilities

INTERNET SECURITY BARRIER P56

PhotoStudio 4.0

design & graphics

Company: ArcSoft

Contact: 510-440-9901, www.arcsoft.com

Price: \$99.99 (SRP)

Requirements: Power Mac, Mac OS 8.5 or later, 32MB RAM, 50MB free hard disk space, CD-ROM drive

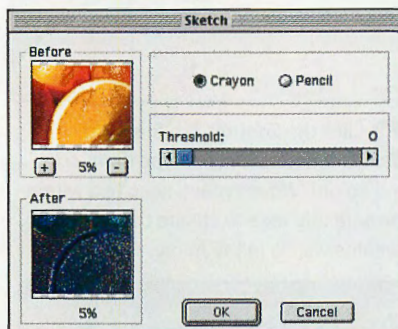
With the text tool, some tweaking, and a lot of patience, you can do more than just edit photos.

With so many people going gaga over digital cameras these days, it's little wonder that photo-editing tools are popping up in droves. One of the latest is ArcSoft's PhotoStudio 4.0, an image editor that claims to be "the most powerful photo-editing tool for your home and office." We guess ArcSoft's never heard of Adobe.

PhotoStudio packs in the goodies—image-editing tools, multiple layers, organization, batch processing, effects, photo sharing, and more. However, once you plunge in, you discover program sluggishness, effects anomalies, and the worst-designed preview window ever. Most editing tools provide simple control for the average consumer but not enough preferences for fine-tuning images. We would appreciate better brush options, real masking ability, effects options, and—hello—some white-balance correction.

We like the freehand selection tool, which combines freeform and point-and-click selecting. The red-eye removal works well, but only if the glare is contained within the pupil. The smudge, shape (good

for establishing text boxes), clone, magic wand, and lighten-darken tools also score points. However, there's no performance difference between the paintbrush and spray-paint tools, and we're miffed that the text tool only allows left alignment and you can't resize the crop box.



We expected to see an artistic rendition with the Crayon Sketch—we'd like to know what box of Crayolas PhotoStudio uses!

When it comes to fixing photos, PhotoStudio gets kicked to the curb. It doesn't offer any controls for white balance, nor does it have color-balance controls to correct color casts. The Tone

adjustment works like a levels adjuster, but after fine-tuning each RGB layer, we still couldn't turn our yellowish-looking shrimp white. The hue controls didn't help either. Also frustrating, PhotoStudio defaults to its proprietary format when you select Save As, though you can save your work as a JPEG, TIFF, or PICT file.

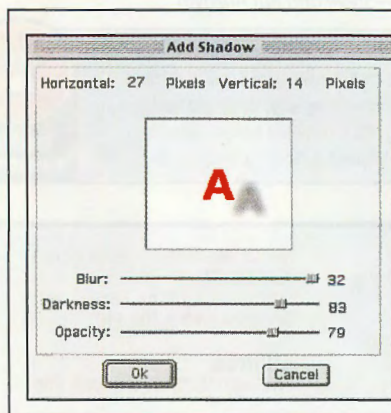
The preview windows, which pop up for every function and allow you to see changes before committing them to an image, are the worst part of all. These windows feature before and after boxes with plus (+) and minus (-) zoom buttons. With lower-res photos, preview interaction isn't too sluggish. With high-res 6MB photos, it's slower than an Adam Sandler character. Our preview started at 4 percent, and each click of the plus button increased our view by a whopping 1 percent, complete with rendering lag time. Thank heavens the zoom increased progressively in the higher percentiles.

Some of the effects previews are baffling—what you see isn't always what you get. When we created a drop shadow in the preview window, we got results nowhere near our set parameters. When we added a 3D tile effect, the preview showed the grid lines incorrectly or not at all as we stepped through the zoom levels.

A Carbonized Mac OS X version is coming in June. For the price of PhotoStudio 4.0, however, you're better off snagging a copy of Adobe Photoshop Elements (\$99) rather than waiting...and waiting...and waiting.

—Kris Fong

good news: Simple to use.
bad news: Slow previews. Effects inaccuracies. No color balance.



You call this a preview? We set a soft shadow in the Add Shadow preview window, left; the actual shadow it produced in our bug photo is on the right.





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DV Converter Roundup

hardware

Dazzle Hollywood DV-Bridge

Company: Dazzle Multimedia

Contact: 888-212-8045 or 510-360-2300, www.dazzle.com

Price: \$299 (SRP)

Requirements: 300MHz G3 or faster, Mac OS 9.0.4 or later, 64MB RAM, 800 by 600 display, FireWire port, QuickTime 4 or later

Formac Studio

Company: Formac

Contact: 888-212-8045 or 510-528-9300, www.formac.com

Price: \$399 (SRP)

Requirements: G3 or faster, Mac OS 9 or later, 64MB RAM, 3MB free hard disk space, CD-ROM drive, FireWire port, QuickTime 4 or later

PowerR Director's Cut

Company: PowerR

Contact: 800-729-6970 or 206-282-2000, www.powerr.com

Price: \$289 (SRP)

Requirements: Power Mac G3 or G4, Mac OS 8.6 or later, 64MB RAM, FireWire port, QuickTime 4 or later

Converter Basics

The main benefit of working in a DV format is that you can edit and copy video without loss in image quality. Analog video loses image quality whenever it's digitized or copied. The Formac Studio, Dazzle Hollywood DV-Bridge, and PowerR Director's Cut all convert analog to DV so you can import it to your hard drive and work with it much as you would with video that originated in the DV format. The converted DV video won't look quite as good as the analog source tapes, but the quality you can get out of these converters is pretty astounding for the price.

DV uses *nonsquare pixels*, which look squished or stretched when you view them on a computer monitor. To compensate, you can attach a TV to any of the three converters while you're editing to get an accurate preview of your work.

All three of these converters accept video originating in VHS, SVHS, VHS-C, Hi8, 8mm, DV, and DV8 sources, and can capture video from your VCR or DVD player at full-screen resolution up to 30 fps.

You've finally decided to upgrade your G3 or G4 to accommodate your movie-making interests, but some of your best work is stretched across dozens of 8mm and Hi8 tapes. The question: How can you convert your old-school format to modern-day digital technology? The answer: Get a DV converter. These devices allow you to capture footage from analog sources and digitize it for digital editing and manipulation. However, not all DV converters are created equal. If you're ready to make a foray into this market, here are three entries to consider.

Dazzle Hollywood DV-Bridge

The Hollywood DV-Bridge is Dazzle's compact, low-priced foray into the analog-to-DV Mac market. The plug-and-play device is easy to use, and its device control (perhaps its best feature) makes searching through your video incredibly easy.

The Hollywood DV-Bridge has two FireWire ports (one in, one out), a full set of analog I/O, and supports video pass-through to a TV monitor. Unlike other DV converters, the Hollywood DV-Bridge requires a power source to run, but makes up for that by including device control via LANC (Local Application Control). LANC is a protocol for controlling devices like camcorders and playback decks (VCRs and audiotape decks) from a software app. If you're capturing video in iMovie and have the DV-Bridge connected to a LANC-controllable camera or deck, you can play, pause, and shuttle through your video using iMovie or another DV editor. The ability to run your deck from iMovie makes the capture process much faster and easier, and tends to save drive space since it eliminates false starts and stops.

Video quality using the Hollywood DV-Bridge is quite good. With iMovie, the image tended to match the source pretty closely in terms of brightness and contrast. Shadow areas didn't look blurry, and bright areas retained a lot of detail. Video captured by analog devices often introduces a degree of blur, but the video captured by the DV-Bridge was very sharp.



The Hollywood DV-Bridge not only does a good job of converting video to DV, but can also control your LANC-enabled camera or deck.

The DV-Bridge has the common FireWire hot-swapping problems that other DV converters also encounter with iMovie. If you don't have the DV-Bridge plugged in when iMovie starts up, the program either won't recognize the device or won't see the video signal. In fact, iMovie was a little pickier with the DV-Bridge than with other converters. In the course of several hours spent capturing and playing video via the DV-Bridge, iMovie occasionally failed to reacquire the video-in signal after toggling between edit and capture modes. This problem may have more to do with iMovie than with the DV-Bridge, but it's worth noting.

Any user who is looking for a good analog-to-DV converter would do well to consider the DV-Bridge, especially at such a low price. Its biggest selling point is device control: Once you've run a video deck using iMovie's VCR-like interface, you'll never again want to synchronize by simultaneously pressing the deck's Play button and your software's Capture button. This feature alone will save time, effort, and hard drive space. If you have a LANC-compatible device, get this converter.

Formac Studio

The Formac Studio is like Kit, the talking car from the TV series *Knight Rider*. They both look awesome on the outside, but the really good stuff is on the inside. Designed for more than just converting digital video, the Studio also has the ability to capture and digitize analog video and audio from TV and radio tuners or analog devices. It's priced a little higher than the other DV converters we've reviewed, but all the extras make it worth the cost.

The Studio is studded with lots of input and output jacks, including two FireWire ports, a full set of analog inputs (SVHS, RCA video, left and right stereo RCA audio), a full



Its many features, such as bus power, TV and radio tuners, and a sexy design, make the Formac Studio a pretty irresistible device.

set of analog outputs, a coaxial cable input for your TV, and a coaxial antenna input for your radio. The Studio doesn't come with a power supply because it runs off the bus power supplied by the FireWire cable. An optional AC adapter is available for purchase (\$25), but only two small groups of people will need it: those who have installed FireWire cards that don't support bus power, and PowerBook owners, whose PCMCIA cards don't support bus power.

You can capture and edit video from the Formac Studio in any DV-editing package such as FinalCut Pro, iMovie, or Adobe Premiere 6, but before you can take full advantage of the Studio, you must install the bundled ProTV software. The software includes a video codec and a ProTV controller application that you can use to capture video and tune in to TV or radio programming. Web buffs will like ProTV's export features, which make creating Internet-ready movies a simple point-and-click affair.

After installing the software, we plugged the Studio into our FireWire chain and started up iMovie. The program recognized the Studio immediately, but before iMovie could capture video from the RCA input, we had to set the video source to composite video or S-Video from a pop-up menu in the control strip. At times, iMovie had a hard time recognizing the Studio—make sure both your video source and the Studio are hooked up to your Mac before launching iMovie, and you should have no problems.

The Studio's DV conversion looks great, but its video signal tends to be on the bright side, sometimes so bright that hot areas wash out and lose detail. iMovie can't adjust video levels (brightness, contrast, black level) to compensate, but to a limited extent Formac's ProTV software lets you control brightness and contrast with sliders.

An LED indicator set into the front of the Studio indicates whether you are converting from analog to DV or DV to analog—you can press a button to toggle between the two options. Studio will try to autosense what it should be doing based on what's plugged in. Unfortunately, Studio guessed wrong about 20 percent of the time because we were

constantly plugging and unplugging things on the FireWire chain and switching between capture and edit modes in iMovie. When this happens, Formac tells you to press the reset button on the front of the device.

At \$399, the Formac Studio is at the high end of DV converter prices, but it offers great TV and FM radio features. The ProTV software gives you a lot of control over your video source and is reasonably easy to use. Bottom line: The Formac Studio offers a lot of exclusive features in a good-looking box.

PowerR Director's Cut

One of the many cool things about Apple's FireWire-equipped laptops is the option to take them out in the field for use as mobile editing suites. If you're not shooting with a DV camera, though, that FireWire port won't do you much good. Enter PowerR Director's Cut—its rugged metal case, small size, and ability to run off bus power make it perfect as part of a mobile setup and should appeal to anyone who does video work for a living.

The Director's Cut uses a single FireWire port for DV-signal input and output. It has one set of analog inputs (RCA video and stereo audio) and two full sets of analog output jacks—one sends a signal to a VCR, the second is for hooking up a TV monitor. A phono jack with an independent volume control lets you monitor the audio passing through the box.

Because computers don't display DV images accurately, the converter's option for monitoring DV signals on a TV monitor makes it much easier to gauge the quality of converted video while you're editing it. Video quality running through the Director's Cut was generally excellent. It produced crisp images, very close in brightness and tonality to the original source material.

One of the best features of the Director's Cut is that it runs on the bus power supplied by the FireWire cable. You can get up and running by simply plugging the Director's Cut into your Mac and connecting an analog video source to the device—no extra power cable adds to the spaghetti-like tangle of cords under your desk. An optional power supply is available for users who have



Bus power, an extra set of video outputs, and a headphone jack make the Director's Cut great for DV conversion on the go.

FireWire connections that don't send power over the bus. This product could truly be a poster child for plug-and-play usability—it doesn't require a separate power supply or make you install software.

As most of you know, iMovie doesn't work with analog video sources. If you want to use an analog-video camera or plug in a VHS or DVD player, no analog-to-DV converter is more compatible with iMovie than Director's Cut. With most converters, iMovie won't recognize the device or the video stream if you don't have the device already plugged into the converter when the program starts up. But iMovie recognized the Director's Cut every time, regardless of when we connected it.

PowerR offers two Director's Cut packages. A \$399 International model captures PAL and NTSC video signals; a \$289 standard version lacks PAL support. Neither version of the Director's Cut includes the FireWire cable, so expect to add that extra purchase to the cost.

The pure simplicity of Director's Cut and its compatibility with iMovie makes it perfect for someone who doesn't want to spend even 30 seconds learning about a product. It's a great converter for both pro users and newbies. If it had device control, it would be the perfect analog-to-DV converter. Even without this feature, its low price point and great design make it an excellent product.

—Rick Sanchez

Dazzle Hollywood DV-Bridge

good news: Device control. Small footprint. Low price.

bad news: No bus power over FireWire cable.



Formac Studio

good news: TV and radio tuners. Bus powered. Excellent design.

bad news: No device control. Physically large. Software required.



PowerR Director's Cut

good news: Bus powered. Small footprint. Low price.

bad news: No PAL support. No device control. No FireWire cable.



iMac Special Edition

hardware

Company: Apple

Contact: 800-692-7753, www.apple.com

Price: \$1,499

Specifications: G3/600, 256K Level 2 cache, 128MB RAM, 40GB Ultra ATA hard drive, CD-RW drive, ATI Rage 128 Ultra with 16MB SDRAM, 10/100Base-T Ethernet, 56-Kbps V.90 modem, 15-inch CRT screen, Apple Pro mouse and keyboard

The cute-as-a-bug iMac has had three great years of success in turning computer newbies and artsy-fartsy types into Mac lovers. With the iMac Special Edition, Apple seems determined to redefine the iMac as a hip music machine (despite the oddities in its case patterns). The iMac SE delivers a nice performance boost and some cool audio features that prove you can't judge a book by its cover.

The iMac Special Edition isn't a brand-spankin'-new machine; it's more of a speedy upgrade to its predecessors with some musical amenities thrown in. New to the iMac is a built-in, slot-loading 8X4X24 CD-RW drive. Though this drive is somewhat noisy and isn't one of the faster ones on the market today, its long-awaited presence is welcome, and it does a commendable job.

Spiffy on the inside, but the Blue Dalmatian exterior is for the dogs.

To complement the CD-RW, Apple has included a multimedia bag of accoutrements: iTunes (for making music CDs), 122 MP3 files (music and spoken word), iMovie 2, Harmon Kardon Odyssey speakers, 16-bit stereo and 44.1kHz audio I/O, two FireWire ports, two USB ports, a built-in mike, and a hefty 40GB hard drive. The software bundle also includes Quicken Deluxe 2001, AppleWorks 6, Bugdom, Nanosaur, Cro-Mag Rally, Earthlink, Faxstf 6, Palm Desktop, and more.

This iMac boasts improved performance. We ventured beyond the safety of Bugdom to take out our aggressions in Unreal Tournament. With the Rage 128 Ultra, gameplay and frame rates were fluid and free of hiccups (as confirmed by our eventual motion sickness). With video and audio editing, rendering times were fairly quick. However, we did experience a few

frame glitches in video playback (iMacs are intended for everyday users—not for hardcore gamers or multimedia wizards).

The iMac SE ships with Mac OS 9.1 (as of press time), which features a special built-in CD-burning app called Disc Burner, negating the need for a third-party CD-authoring app. However, we found it difficult to copy non-audio CDs with Disc Burner and one CD drive—Disc Burner won't let you create a disc image. After installing Roxio Toast and disabling the Disc Burner extension, we got error messages, though we managed to work around them. On the other hand, burning audio CDs with iTunes was a snap.

Apple included an eclectic and vast variety of free MP3 files—from Filter and Phish to Pat Metheny, the B-52s, Lou Reed, k.d. Lang, New Order, Barenaked Ladies, some cool indie bands, and J.K. Rowling's reading of the first three chapters of *Harry Potter and the Goblet of Fire*.

On the downside, the new iMacs ship with the Apple Pro mouse. While we like its design, often the optical sensor couldn't keep up with sudden mouse moves, causing the cursor to fly sporadically across the screen. We're also not too keen on the Blue Dalmatian or Flower Power patterns (luckily, Graphite is also available), but as this has no affect on performance, we won't knock the iMac on this account.

For the average user who wants speed and doesn't need to add upgrade cards, or for those who are short on space, the iMac Special Edition packs a nice punch in a small package.—Kris Fong

Norton Info System Ratings (longer is better)

PowerMac G4/500	1287
PowerMac G4/450 MP	1274
iMac SE 600	1230
PowerMac G4/450 Cube	1208
PowerBook G3/500	1114
PowerMac G4/400	1108
iMac 400	1010
PowerMac G3/400	973
PowerBook G3/400	924
PowerMac G3/450	893
PowerMac G3/333	841
iMac 333	808
iBook 300	741

How does the iMac Special Edition stack up to its siblings on speed? Not too shabby at all.



PHOTOGRAPH BY ARON LAUER

good news: CD-RW, finally! Simplicity meets speed.
bad news: Patterns are a toss-up. Disc Burner app can be problematic. Mouse is skittish.





Need a hero? Here's
a couple for hire...

Heroes III Complete

fun & games

Company: 3DO

Contact: 650-385-3000, www.3do.com

Price: \$39.95 (SRP)

Requirements: 180MHz Power Mac 603e or faster, Mac OS 8.1 or later, 64MB RAM, 450MB free hard drive space, CD-ROM drive

There are two types of Mac gamers—those who have never played Heroes of Might and Magic and those who are addicted to it. Word to the uninitiated: If you're into war and strategy, it doesn't get much better than this.

With its solid gameplay, there's little not to like about Heroes III Complete. For the price of the original Heroes III, you get the full version of Heroes III, two expansion packs, and a slew of new maps and quests. You control a team of heroes who must fulfill a number of quests to gain honor and valor in the game's fantasy world.

You can play Heroes III in single-player or multiplayer modes (you can now go head to head in GameRanger). The game includes two expansion packs (Armageddon's Blade and The Shadow of Death), both of which feature a variety of new campaigns, new heroes (16 types total), and new creatures (18 types total). We were disappointed, however, that the Mac version lacks the campaign and map editors that PC folks get with their expansion packs.

Another downside is the PDF manual, which you'll want to consult so you can unravel the game's complexity. This means you'll have to print out all 13.5MB of it.

Still, the addictive nature of Heroes III Complete is reason enough to buy it, particularly if you're already a Heroes fan. Mac OS X users, note that Heroes should run in the Classic environment, but there are currently no Carbonization plans.—*Samantha Craggs*

good news: Addictive gameplay. Satisfying add-ons.

bad news: PDF manual is a pain. No map or campaign editors.



Windows
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for Mac

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Turn out the lights and get ready for your own personal concert. The free Microsoft® Windows Media™ Player 7 for Mac gives you access to music, movies and more. From works by the most popular artists and film studios to cool, obscure stuff some guy did in his garage. Whatever you want—it's yours. Rock on.

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Monopoly Casino

fun & games

Company: MacSoft

Contact: 800-229-2714, www.wizardworks.com/macsoft

Price: \$29.99 (SRP)

Requirements: 180MHz Power Mac or faster, Mac OS 8.1 or later, 32MB RAM, 250MB free hard disk space, QuickTime 4.0 or later, 800 by 600 display, CD-ROM drive

For gambling addicts, it's reassuring to know that you can get a quick fix straight from a computer game, without any added expense—be it airfare, your bank account, or your sanity. Though many casino software games induce snores from hard-core Vegas and Atlantic City devotees, a few are just as addictive as the real deal. Unfortunately, MacSoft's Monopoly Casino isn't one of them.

MacSoft tries hard to bring Monopoly's kitschy appeal to an otherwise crowded game genre. Though it may spark interest at first glance, the gameplay grows tiresome after an hour or so. Strip out all of the Monopoly icons, and you're left with a rudimentary game that isn't too different from the offerings of talented shareware developers.



What? Three in a row and no prize? Craps!

We had some trouble with our first installation due to a faulty disc. With a second disc, installation was painless. The interface resembles a casino floor, with areas devoted to card tables (variations of poker and blackjack), roulette, craps, slot machines (casino and Williams slots), keno, and video poker. Just roll your cursor over each section to reveal what games are



Though this slot has a 3D, modern appeal, many of the other slots use rehashed graphics.

available in that area. Start by choosing your token (we always choose the dog). Next, select how much Monopoly money you want to gamble with (a cool million) and proceed to the game floor. We wanted to learn how to play craps, and though the manual explains the rules and betting outlines, it wasn't thorough enough for us to understand fully how to play the game. (The manual covers how to play every game in the package.) We had better luck—and a lot more fun—on the poker and blackjack tables. Poker fans have five different games to choose from—5 Card Draw, 7 Card Stud, Pai Gow Poker, Texas Hold 'Em, and Omaha Hold 'Em—a few of which feature game variations.

The slot machines are boorish, and although there are 16 varieties of casino slots (plus three Williams slots), each one seems to rehash the previous slot. We were baffled by some of the winnings—one slot pays if you get a particular icon on any reel; we were hooting when we got three of these icons in a row, only to find out this combo doesn't win anything. Sheesh!

The game features big-band swing music in the background, which you can also play on any CD stereo system (it's an enhanced CD, with separate game and audio files). Though the music is fun to listen to and liven up the game's mood, it doesn't loop, and it stops when the CD



Though poker tables intimidate us in the real world, we had a streak of luck with 7 Card Stud.

ends unless you retoggle the music check box in the preferences. The design elements and animations are appealing but not great, and many elements and animations appear over and over again. We witnessed a dozen coins flying out of a slot machine when we won 2 bucks and saw the same dozen come out in slow motion when we won 80. Also, Mac OS X gameplay is buggy.

Though the game has potential for casual card players and those looking to brush up on their casino skills, Monopoly Casino lacks the bells and whistles and the sense of spontaneity that keep players playing.—Kris Fong

good news: Good card-training ground for newbies.

bad news: Uninspiring gameplay. No betting-strategy info.



Sonicfire Pro 2.0

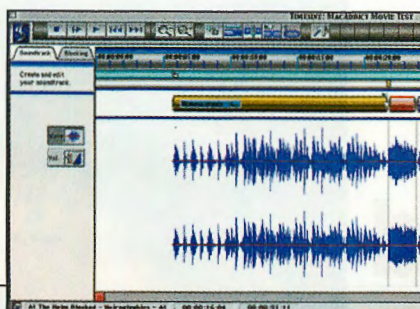
multimedia

Company: SmartSound

Contact: 800-454-1900, www.smartsound.com

Price: \$349 (SRP)

Requirements: Power Mac, Mac OS 8-9.1, 8MB RAM (16MB recommended), 8MB free hard disk space, CD-ROM drive



Which is the guitar solo? Is it *this* Bulls On P...? Or *that* Bulls On P...?

We took a drum-and-bass track, blocked it into 50 short segments, and mixed each segment without regard for beats or timing. Sonicfire Pro automatically faded and adjusted the beginning and end of each block to smooth the transitions, although to a lesser degree of perfection with our MP3s than with its own CD tracks. Some tweaking produced seamless transitions. You can save finished projects as QuickTime movies.

However, Sonicfire Pro has its share of hiccups. The program won't let you rename sound blocks. After blocking Rage Against the Machine's "Bulls on Parade," we ended up with 27 sound blocks named "Bulls On P..." Keeping track of the guitar solo block was frustrating. Make sure to abbreviate titles from the start so you'll at least have a hierarchy of blocks (for example, "Bulls1," "Bulls2," and so forth). Also, the Wave function, which displays a track's waveform, runs slowly. We experienced a few freezes in the video window, but not many. Currently, the app is not Mac OS X compatible, but a supported version is due this summer.

Though we recommend a video editor if you want to maximize your video-making capabilities, Sonicfire Pro is a handy tool for adding music to video—especially if time and musical talent are your shortcomings.

—Matt Wheeland

good news: Easy to use.
bad news: Bundled music is uninspiring. Buggy.



For those of you who wish you had an ounce of musical talent to lend to your video masterpiece, you're in luck. SmartSound's Sonicfire Pro 2.0 allows you to create video soundtracks easily despite some bugs and overlooked functionality—music ability and/or video-editing knowledge not required.

The package comes with two royalty-free audio CDs: *Dimensions* contains diverse tracks, which reminded us of bad soundtracks from rerun TV shows; the *Edge Series* volume 1 compilation features various dance tracks. Installation was easy; however, ten minutes of listening to the included music was about all we could tolerate. Luckily, you can import your own music and video files (CD audio, AIFF, MP3, DV, AVI, MPEG, and QuickTime) into the interface.

Sonicfire Pro allows you to add audio to a silent video or layer audio over a video's existing soundtrack (if you want to replace the existing soundtrack, you'll need to use a video-editing program to remove the original audio first). The program features the Maestro, a tool that helps you select the best type of music for your video clip by walking you through a series of music selections. This feature enables you to put together a complete soundtrack in a matter of minutes and works superbly.

Other highlights are the blocking and sound-looping features, which allow you to quickly edit and create your own music tracks. Blocking lets you cut a sound file into smaller bits so you can, for example, make the segments coincide with your video edits or emphasize a recurring sound. Sound-looping plays a specified music segment repeatedly.

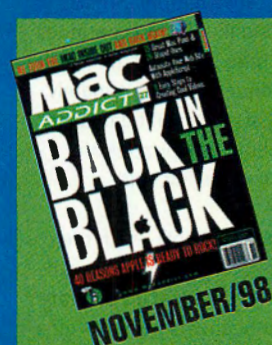
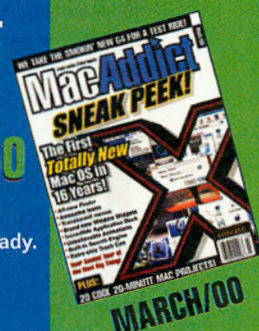
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Escape from Monkey Island

fun & games

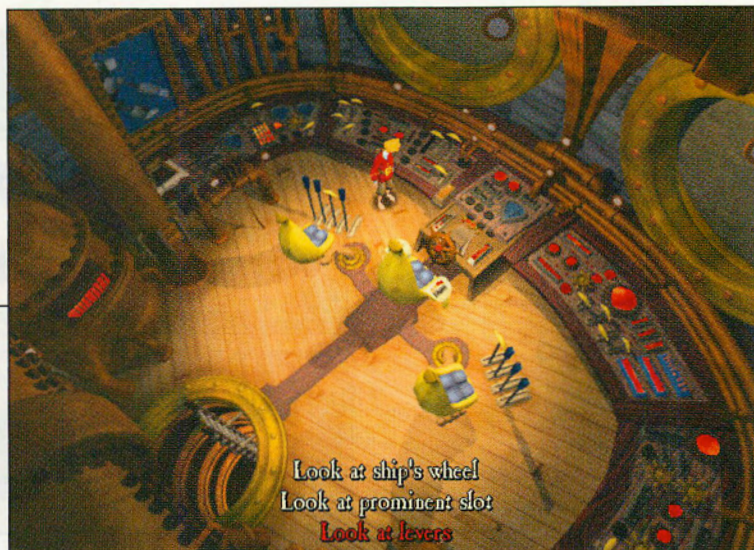
Company: Aspyr Media

Contact: 512-708-8100, www.aspyr.com

Price: \$44.95 (SRP)

Requirements: 233MHz G3 or faster (333MHz recommended), 64MB RAM (96MB recommended), 100MB free hard disk space (500MB recommended), hardware 3D accelerator (Rage Pro, Voodoo3, or better), 4MB VRAM (8MB recommended), Open GL 1.2.1 or later, 8X CD-ROM drive

One of many puzzles with a fun payoff—we won't reveal what happens because we don't want to spoil it for you.



Escape from Monkey Island continues the long tradition of adventure games that started on computer mainframes in the seventies with such classics as Advent and Dungeon. The genre has evolved from simple text-only interfaces to graphical adventures. This fourth rendition of Monkey Island continues that trend, shifting from its earlier 2D animation to fully rendered 3D. Fortunately, all the extra graphical glitz hasn't damaged Escape's key attraction—the puzzles are just as enthralling, compelling, and irritating as ever.

Escape's interface is simple—with the arrow keys, you control the hero, Guybrush Threepwood (possibly the most inept pirate ever to sail the Caribbean), as he fights off a new villain, an old one, and the encroaching

forces of gentrification. You can pick up items (such as a gold-plated banana picker, a parrot call, or a low-alcohol-content grog), examine them closely, use them, and combine them to help solve puzzles. You can also converse (using fixed, preset phrases) with people you encounter. On the plus side, the presets avoid the how-do-you-phrase-the-command-to-do-this-obvious-task problem that some adventure games (particularly older ones) run into. Unfortunately, you can solve puzzles simply by process of elimination, using every item in your inventory on every item in a scene until you attain success.

The puzzles in Escape from Monkey Island are pleasantly insane—you may get odd looks when you explain you're trying to grab a milk bottle while you ride a wedding boat solo through molten lava so you can throw it at a crazy hermit's head (yes, this is a real puzzle in the game!). Though tricky enough to provide a challenge, these puzzles don't trigger the sort of wall-pounding frustration that some of the more difficult Infocom games did back in the eighties. Part of the reason is that Escape from Monkey Island's gameplay is almost

entirely linear—it's very difficult to trap yourself in a losing situation.

This linear plot, regrettably, is also one of the game's greatest weaknesses. Because each island you visit consists of a relatively small number of scenes, the puzzles are often easier than they should be; the game practically herds you toward the solutions. While the game's overall stability is outstanding (it also runs in Mac OS X's Classic mode), it exhibits one spectacular bug: Head south on the beach at Jumbalaya Island, and you'll find yourself moving slowly in a scene with no background.

If your idea of a good game stretches beyond the confines of "kill everything that moves," Escape from Monkey Island is a satisfyingly complex adventure game. And even if no-brainer shooters are your cup of tea, there's a good possibility that the Monkey Kombat section will sate your violent urges.—*Ian Sammis*

Monkey Tactics

If you find yourself wanting to drop-kick your computer out of sheer frustration, here are a few survival tactics to help you keep your sanity:

1 Escape from Monkey Island is not a game of lightning-quick reflexes. Try to solve puzzles, not beat the clock.

2 If you've tried the same maneuver four or five times without success, try something else—you're probably not on the right track.

3 A few puzzles do require that you time a move correctly—get used to the speed at which Guybrush moves and goes about his tasks.

good news: Engaging puzzles.

Good storyline.

bad news: Strict linear structure can feel constraining. Occasional bugs.



The land of vast nothingness? Nah, it's a bug—luckily, you don't need to go here to win the game.



SEVEN EVERY TIME.

At REAL Software, we like it simple. Take our award-winning product, REALbasic, for example. People call it the powerful, easy-to-use tool for creating their own software for Macintosh, Mac OS X and Windows. We call it a problem solver. You've probably said, "Wouldn't it be great if there was a little application that..." REALbasic fills that blank.

Creating applications couldn't be easier. Just drag and drop interface elements while REALbasic handles the details. You concentrate on what makes your stuff great — your ideas!

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Complex problems shouldn't require complex solutions. The answer is REALbasic.



Download a free demo. www.realbasic.com

GameRoom

fun & games

Company: Sierra

Contact: 800-757-7707, www.sierra.com

Price: \$19.95 (SRP)

Requirements: 233MHz Power Mac or faster, Mac OS 8.5.1 or later, 32MB RAM, 95MB free hard disk space, 4X CD-ROM drive

Sierra's GameRoom provides an entertaining frolic through six classic parlor games, offering enough variety and fun to keep any hyperactive kid (or adult) entertained for hours. You can play pinball, darts, pool, table tennis, table hockey, and shuffleboard—without getting your hands chalky or having to board a cruise ship with Kathie Lee.

Games launch from the main interface, which resembles a frat-house game room. One weirdness: While the main interface

These aren't the most beautiful graphics we've seen, but their simplicity works for us.

launches most games smoothly, it quits to launch pool and pinball, making it seem as though these were separate apps kludged on at the last minute.

In some games (such as table hockey) you play against a computer opponent. Other turn-based games (such as shuffleboard) add multiplayer support. The variety of preferences available is a plus—for instance, shuffleboard offers four different tables, and pool gives you the option of playing eight ball, nine ball, or snooker.

While there's good value in this pack, some of the games are duds—in particular, shuffleboard and darts. It was hard for us to



get enough delivery force using the mouse—our shuffleboard puck barely traveled and our dart throws looked as if we had limp wrists. Another annoyance: ping-pong caters to a two-button mouse serve—one-button Mac mice be damned (you can use the keyboard, though). And Mac OS X gameplay was buggy. Still, GameRoom is a solid offering that should appeal to the lounge gamer in everyone.—Cathy Lu

good news: Lots of options. Most activities are fun. **bad news:** Some games launch erratically. Darts and shuffleboard are washouts (probably because we suck).



Internet Security Barrier

utilities

Company: Intego

Contact: 805-868-7920, www.intego.com

Price: \$99.95 (SRP)

Requirements: Power Mac, Mac OS 8.1 or later, 64MB RAM, 18MB free hard disk space, Open Transport, Internet Config, 800 by 600 resolution or higher

It's only natural to want to feel as safe behind your computer as you do in your own home. Now you can. Intego's Internet Security Barrier stocks your medicine cabinet with Virus Barrier, installs the NetBarrier 2 security system, and filters Web sites with Content Barrier—a rather myopic watchdog with a short attention span.

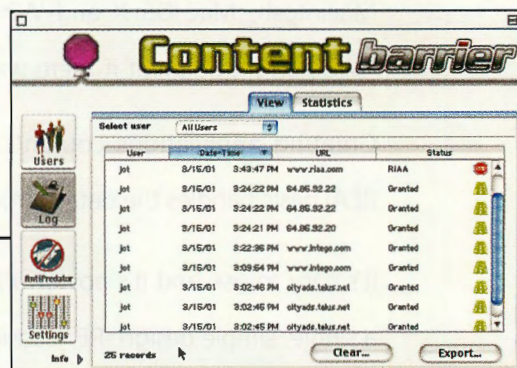
Virus Barrier is the most unobtrusive always-on virus protection we've used—it never interrupts software installation. It reliably stomped on every virus we introduced, satisfyingly displaying "virus eradicated" messages in true hunter-killer

You can create custom filters to block questionable content with Content Barrier—but its performance is less than stellar.

fashion. The contextual menu feature offers immediate scans of files and folders, although it pegged Stuffit archives as "corrupted" even though the main application scanned them successfully.

It's questionable how useful a firewall is for the average user, but we like Net Barrier 2. The Anti-Vandal feature kept our Mac safe while we tracked overall Net traffic with real-time gauges and watched our browser's cookie count soar to 420 within days. The Ad filter lets you surf mostly banner free if you can live with error messages replacing ads. Avoid the spam filter, though, as it intercepts and deletes email based on your criteria, but keeps no record and leaves you no recourse.

Like any rules-based Web filter, Content Barrier is fallible. With Adult Content blocked,



we still found sites that made us blush—and then, confusingly enough, the filter kept us from visiting a harmless JavaScript resource Web site. It has a broad content-preset selection, but handles multiple users poorly. The Anti-Predator filter, meant to protect kids in chat rooms, does not function reliably.

Internet Security Barrier is an excellent collection of tools. The only barrier in the way of our giving this suite a *Freakin'* Awesome is Content Barrier itself.

—Jaap O. Tuinman

good news: Completely transparent virus protection. Simple. Feature rich. NetUpdate keeps all components current. **bad news:** Content Barrier is extremely weak.



Formac FireWire CD-RW

hardware

Company: Formac Electronic

Contact: 510-528-9300, www.formac.com

Price: \$349

Requirements: Power Mac, Mac OS 8.6 or later, FireWire port

When Formac's new FireWire CD-RW first arrived in the MacAddict offices, we kind of chuckled at its space-age, chubby exterior. Though it's wrapped in a cool silver, polycarbonate skin, the Formac drive (16X write/10X rewrite/40X read) looks like it's retaining water. Its body bloat gets in the way of a crappy eject button, which requires some fingernail length and strength if you want to engage the darn thing. And when

you successfully press the button, the drive door will squish your poor fingers against whatever surface the drive happens to be standing on. The open door also conceals the eject button, which means you have to nudge the tray to close it again.

The drive features two FireWire ports and stereo RCA outs, and it ships with Adaptec Toast 4.11, which garners major points. However, after installation Toast wouldn't recognize the Formac drive. We found the drive incompatible with iTunes—you'll need to disable the iTunes FireWire Authoring Support extension to use the device.

So why does it still deserve a Spiffy? Simple—it's one of the fastest CD recorders

we've tested. Funky interaction aside, this baby's a rocket, and it performs consistently thanks to its burn-proof technology. We copied a 653.3MB folder of photos onto a CD faster than we could make a cup of tea (5 minutes and 14 seconds, to be exact). We upgraded to Toast 4.12 and burned a 643.8MB audio CD in 7 minutes and 43 seconds while we surfed the Web. If it weren't for its design flaws, the Formac would have taken our highest honor.—Kris Fong

good news: Lightning fast. Includes Toast 4.11. **bad news:** Poorly designed eject button and CD door.



PHOTOGRAPH BY AARON LAUER



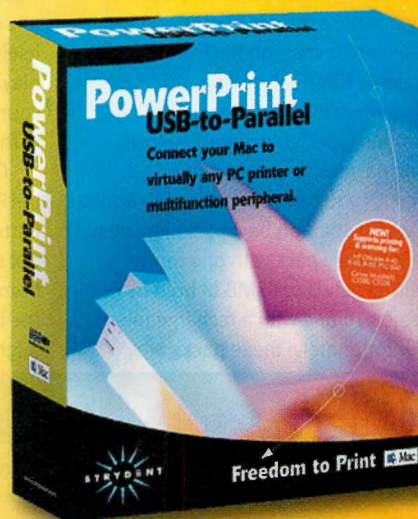
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Rio 800

hardware

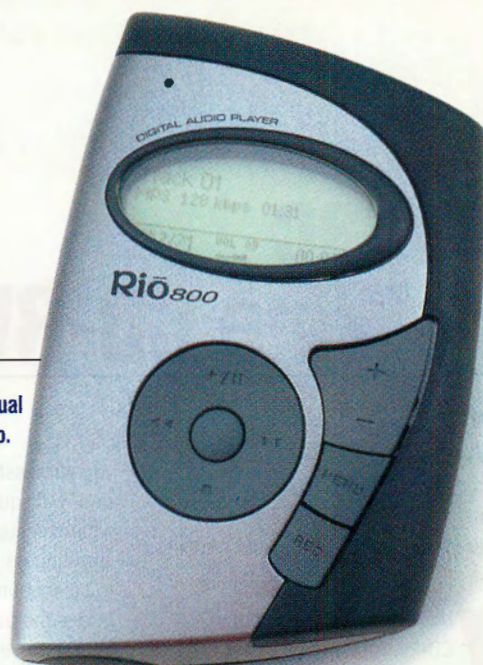
Company: Sonicblue

Contact: 800-468-5846 or 541-967-2450,
www.riohome.com

Price: \$249.95 (SRP) for 64MB version

Requirements: G3 or faster, Mac OS 8.6 or later, 32MB RAM,
35MB free hard disk space, USB port, CD-ROM drive

You can have a virtual
carnival on your Rio.



PHOTOGRAPH BY AARON LAUER

Think about it: A few years ago, you were probably toting around a Walkman that would conveniently break right after the warranty ran out or some hefty Discman that skipped more frequently than a five-year-old. Luckily, things have changed—for the smaller and the better. One of the companies leading this latest phase of the eardrum-destroying revolution is Rio (a division of Sonicblue), which produces the renowned Rio line of MP3 players. Its latest offering, the Rio 800, offers the perfect amalgam of power, quality, expandability, and sveltiness.

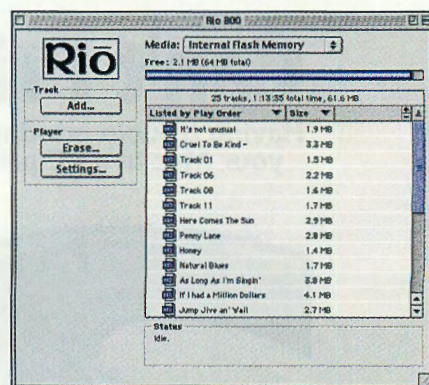
The Rio 800 we tested weighs in at 2.4 ounces and comes with 64MB of internal memory, a classy set of headphones, SoundJam software, a travel case, a voice-recording option, a remote control you can use or lose, and a snap-on back that houses a rechargeable NiMH AA battery. You have your pick of three Rio 800 memory configurations (see “Vital Stats,” below), depending on your procrastinating preference. Or you can expand the Rio 800’s memory with a snap-on backpack, replacing the current battery pack with one that houses either 32MB or 64MB of built-in Flash memory, along with a rechargeable battery. Unfortunately, these packs are

pricey—it’ll cost you \$100 for 32MB and \$150 for 64MB.

In terms of speed, ease of use, and player options, nothing beats the Rio. Sound quality is solid, and our music benefited from the preset EQ settings (rock, jazz, classical, and so on), as well as the separate bass and treble controls. To load your player, simply connect the Rio to your Mac via the included USB cable and drag and drop songs into the SoundJam playlist window. (Mac OS X users will need to use iTunes for compatibility.) Amazingly, the Rio 800 gobbled up 33.9MB of our (yes, legally acquired) tunes in just 1 minute and 37 seconds. Another bonus: The player itself lets you delete tracks or create playlists so you don’t have to keep visiting your software just to reorganize your music in the player.

Of course, nothing in life is perfect, and the Rio 800 is no exception. The rechargeable battery will save weekly battery-buying trips, but since you’re warned not to remove it from the backpack (the battery recharges via the backpack’s AC power adapter), you might find yourself sometimes stuck with an

uncharged MP3 player. In addition, the Rio 800’s battery-level indicator isn’t entirely accurate—our fully charged, newly calibrated battery displayed an 11-hour battery life, yet 3 hours later, the indicator said we had only 4 hours of power remaining. This doesn’t necessarily mean you actually have just 4 hours of playing time left—but it does show that the indicator is flaky.



Yes, we put Moby after the Beatles. So sue us.

Occasionally, as battery power dwindled, so did sound performance (the vocals practically disappeared). Also, the volume button operated sporadically—sometimes it worked, sometimes it didn’t. All of this, unfortunately, is enough of a problem to keep this otherwise fine MP3 player from getting our highest rating.

—Cathy Lu

Vital Stats

You have several configuration options when it comes to the Rio 800. Of course, the decision ultimately comes

down to how much music you want to store on your player, as well as how much cash you have hiding under your mattress.

PRODUCT	PRICE	BUILT-IN MEMORY	EXTERNAL MEMORY	TOTAL MEMORY INCLUDED
Rio 800	\$249.95	64MB	none	64MB
Rio 800 128MB	\$299.95	128MB	none	128MB
Rio 800 Extreme	\$599.00	256MB	128MB	384MB

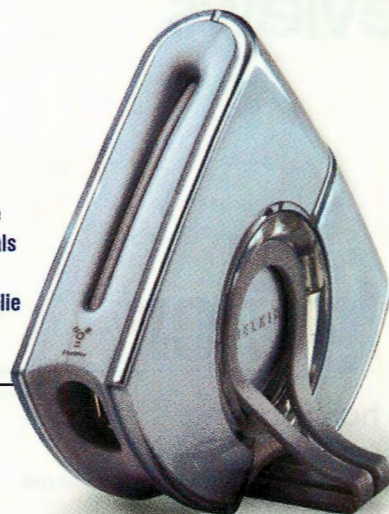
good news: Great software interface. Solid player options. Can expand with the times. **bad news:** You can’t remove the rechargeable battery. Inaccurate battery-level indicator.



spiffy

Belkin FireWire 6-Port Hub

The Belkin hub connects up to five FireWire peripherals to your Mac and pops a mean wheelie in the process.



PHOTOGRAPH BY ARON LAUER

hardware

Company: Belkin

Contact: 310-898-1100, www.belkin.com

Price: \$99.95 (SRP)

Requirements: 266MHz G3 or faster, Mac OS 9 or later, 32MB RAM, FireWire port

Sparking a conversation about hubs is about as exciting as starting an in-depth debate about cables. The dialogue tends to focus on a single question: "Does it work?" Then again, when we first caught sight of the sexy FireWire 6-port hub from Belkin, all we could say was hubba, hubba, hubba.

Among a glut of fruity products, Belkin's sleek and curvy hub is refreshing with its

unique, geek-chic, polycarbonate exterior (the hub is available in silver or white). It features six FireWire ports—five in a single arc on the back and one up front. The unit comes with a FireWire cable and power supply—you can choose whether to power the unit, depending on the type of devices you connect to it.

Belkin designed the hub to stand vertically. Though this saved space on our cluttered desktop, the hub had a tendency to pop—and hold—a wheelie from the weight of our four FireWire connections in its posterior. Plugging in the heavier FireWire cables near the bottom and plugging in one cable up front solved this problem.

So, does it work? The answer: yes—very well. We plugged in a FireWire CD-RW,

scanner, and printer and utilized all of them at the same time without incident. Plus, its repeater feature, which extends the FireWire chain up to 15 feet between devices, allowed us to finally pick up our scanner from the floor and put it on our desk. If you're looking to put an end to hot-swapping your FireWire devices, the Belkin hub will do the job with style.—*Kris Fong*

good news: Handles connections well. Snazzy exterior **bad news:** Has a tendency to pop wheelies.



spiffy

Reality Audio

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Computer Music Magazine

says of the Audiophile:

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Igniter

hardware

Company: Aurora Video Systems

Contact: 810-726-5320, www.auroravideosys.com

Price: \$1,149 (base model SRP)

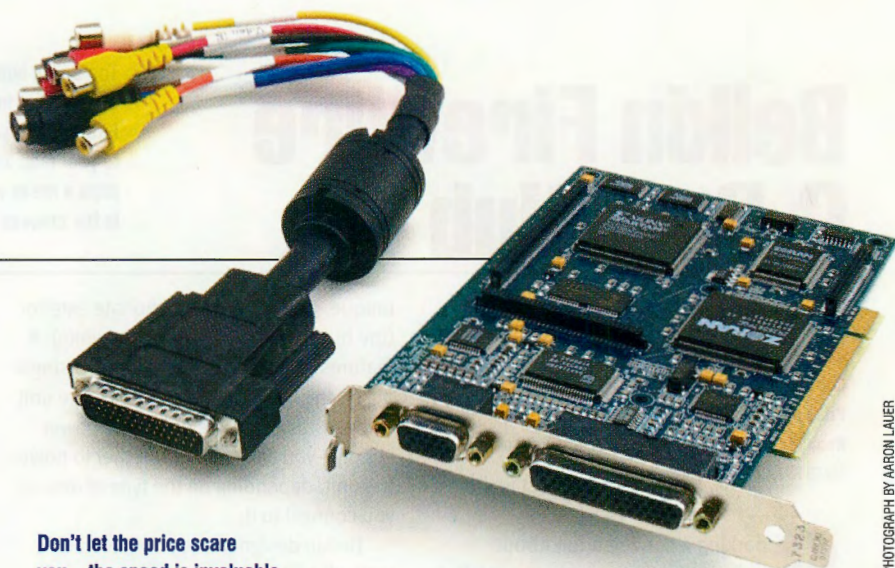
Requirements: PCI-based Power Mac 604e or faster (G3 or faster recommended), Mac OS 8 to 9.1, 64MB RAM (256MB recommended), QuickTime 3.0 or higher, Fast/Wide SCSI or Ultra DMA IDE AV drive

Aurora should be lauded for bringing easy-to-use, incredibly fast video-capture cards to the Mac market. With a steep price tag, the Igniter video-capture card is aimed toward the prosumer video market rather than home-movie hobbyists (iMovie buffs may find the card's technical features baffling). But for budding videographers, the Igniter is the fastest video-capture card on the market at this price point, and it's upgradable for professional use.

The Igniter has a number of upgradable options that bring extra features and/or different connectors to the card (see "Movin' On Up," right). The base model features a PCI card with a breakout cable, consisting of S-Video, composite video, and unbalanced RCA connectors so you can connect analog video and audio devices. These connectors are adequate for most video-capture applications, since most camcorders and VCRs have S-Video output and all have composite video output. The audio connectors are built into the card for tight audio and video synchronization.

The specs of the Igniter are astonishing: they state that in a G3 or G4 system, the Igniter can capture and play back video at 13.3 MBps, and it delivers on this claim. We successfully captured full-screen, 720-by-486-pixel video at 29.97 fps without dropping frames. Of course, to attain full bandwidth, you'll need to set up a RAID configuration (multiple hard drives formatted as a single volume).

Installation is easy—pop the card into a PCI slot and install a couple of components in the System Folder. After that, just configure the card in the Igniter control panel to get it up and running. For testing,



PHOTOGRAPH BY AARON LAUER

Don't let the price scare you—the speed is invaluable.

we used a dual-processor G4/500 with an Ultra160 SCSI interface hosting a 10,000-rpm Cheetah hard drive. When we launched Final Cut Pro, the preferences were already set up to capture from the Igniter, and the results were wonderful. This setup was truly simple and trouble free.

Though the hefty price tag may require some serious decision-making, the Igniter is a great investment for any budding videographer, allowing users to add high-

quality analog support to Macs with built-in FireWire. Plus, the upgrade path allows users to expand their capabilities as their skill set grows. Mac OS X support is also on the way.—Andrew Tokuda

good news: Easy to set up and use. Fast, high-quality video and audio capture. Upgradable.
bad news: Pricey for the hobbyist. Not enough features for the pro user.



Movin' On Up

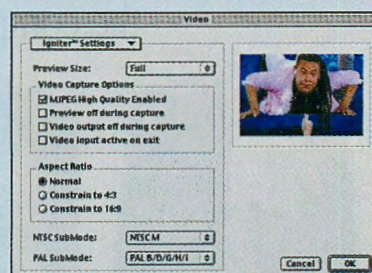
For video professionals, the base configuration probably won't do. Fortunately, you can upgrade the Igniter card to include more-advanced options, setting you back in the neighborhood of \$2,499 to \$7,499.

COMPONENT OPTION

Rather than capturing mixed-color signals as in composite video, the Component Option captures RGB (red, green, and blue) color channels individually, which results in greater clarity. Balanced XLR connections, SMPTE time code, and chroma-keying are also included.

SDI OPTION

SDI (Serial Digital Video) allows you to capture from a video device with digital I/O, providing a more pristine signal from device to card. This option adds digital audio (AES/EBU) capture, SMPTE 259 I/O, and sample rates up to 48KHz.



Configuring the card is a snap. Making a good movie is the hard part.

UNCOMPRESSED OPTION

This option allows the card to capture and play back uncompressed video for ultimate quality without artifacts.

FILM OPTION

The Film Option allows you to capture video at true 24 fps (film quality), plus you can convert footage to video-quality frame rates (29.97 fps) for viewing on a video monitor.

Digital Relay

hardware

Company: Sony Electronics

Contact: 800-352-7669 or 408-432-1600, www.sel.sony.com

Price: \$399 (SRP)

Requirements: G3 or faster, Mac OS 8.6 or later, USB port, CD-ROM drive

The allure of Sony's Digital Relay CD-RW is its all-in-one functionality and battery-operated portability. It plays and records beautifully, but its price/performance ratio is lackluster.

Digital Relay is a portable audio and MP3 CD player that doubles as a CD-RW burner. It weighs in at 95 grams and is slightly larger than a Sony Discman. The rechargeable Li-Ion battery pack lasted just under three

hours during audio CD playback.

For CD, MP3, and data burning (and reburning), Digital Relay was slow yet reliable at 4X write, 4X rewrite, and 6X read speeds. However, we weren't able to record audio in multiple sessions. We hate the bundled DiscRite burning software. The interface is clunky, and the software trashed a couple of our CD-Rs. If you can afford the extra \$89.95, Roxio's Toast Titanium 5 (*Reviews*, Jun/01, p51) will keep you sane.

With CD and MP3 playback, Digital Relay works well, but the playback controls are awkwardly placed on the remote control attached to the earphones. Digital Relay played MP3s flawlessly, though the tiny

display on the remote isn't ideal for sorting through 200 MP3s burned on a CD. Just make sure your files have .mp3 file extensions and are encoded at 128 Kbps, or you'll run into problems.

Sony's Digital Relay is a cool device that performs well, but considering that you can get a faster FireWire CD-RW for \$250 on average and a Sony Discman for about \$80, you're really paying for portability.

—Narasu Rebbapragada

good news: Highly portable.
All-in-one recording and playback.
bad news: Slow. Expensive.
Software sucks.



Sony's Digital Relay works great and fits in your purse—if you're man enough to carry one.

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Brio D-100

hardware

Company: Olympus

Contact: 631-844-5000, www.olympus.com

Price: \$249.99 (street)

Requirements: G3 or faster, Mac OS 8.6 or later, 20MB RAM, 100MB free hard disk space, USB port or SmartMedia card reader, display with thousands of colors

For those seeking an inexpensive foray into digital photography, Olympus's Brio D-100 is one of the best choices out there. The small, lightweight camera isn't perfect, but its easy interface, image quality, and feature set far outweigh the occasional strange color cast.

First the specs: This 1.3-megapixel camera features a 4.5mm, f-2.8 to f-8 autofocus lens; a 2X digital zoom; a 1.5-inch color LCD; a viewfinder; macro mode; and autofocus. The camera comes with one 8MB SmartMedia card, one 3-volt Li-Ion battery, a USB cable, a video-out cable, and bundled Camedia Master photo-editing software.

The camera is comfortable to hold and easy to use. It weighs a mere 5.8 ounces without the battery and memory card. The controls and features are nested in an easy-to-use six-button navigation system. The camera shoots pictures in three

modes: SQ (640 by 480), HQ (1,280 by 960), and SHQ (1,280 by 960).

For its price, the Brio has a robust feature set, including a Burst mode, exposure compensation, and various flash modes (Auto, Red-eye, Night, and Fill). The Night mode works remarkably well, producing sharp images in dark spaces. However, the Auto mode sometimes washed out brighter frame areas. The Macro mode works beautifully in bright light, but in lower light, slight movement (like breathing) gave us blurry results due to the slower shutter speed, and the flash will blow out the shot.

Perhaps Brio's most integral feature for new photographers is the white balance—a system that color-corrects photos internally for different lighting situations. There are four white-balance modes: Incandescent Light (lightbulbs), Fluorescent Light, Clear Sky, and Cloudy Sky, all of which produce a gamut of color correction—some desirable, some not (see "White Balance," below).

Downloading pictures is a snap. Simply plug the supplied USB cable into an available USB port, and a hard drive icon

The Olympus Brio D-100 delivers bright, crisp shots at a relatively low price.

appears on your desktop. The bundled Camedia Master photo-editing software offers standard cropping, rotating, and lasso tools, along with standard filters like Brightness, Contrast, and Color Balance and a few fun ones like Blur, Edge, and Sepia.

As for picture quality, outdoor shots and close-ups that didn't require flash were picture perfect (pardon the cliché). Night shots were better than we expected—clear and sharp, with nice color. Indoor shots, however, were disappointing. Flesh tones were grainy and too red, and the flash often blew out our shots. Our workaround was to stand further away and zoom in on our subject to lessen the flash blast.

The Brio works well and it works simply. The resolution is ample for the casual photographer, and the feature set gives users plenty of room to play.

At \$249, it's a great buy.

—Narasu Rebbapragada

good news: Small. Inexpensive.
bad news: Weird color. Can't save setting preferences.



White Balance

The Brio D-100's preset white-balance settings are fun to play around with, but they produce inconsistent results

depending on the lighting. Experiment with all four settings, but you may end up settling for the Auto default.



AUTO



FLUORESCENT

Though we took this under fluorescent lighting, the Fluorescent Light setting turned our purple cup a shade of blueberry.



AUTO



CLEAR SKY

With the Clear Sky setting, our iris looked sharp, beautiful, and less washed out than with the Auto setting.



PHOTOGRAPH BY AARON LAUER

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powerplay

New Myst game? Um...would you mind if we skipped making the August 2001 issue? Rats.

Myst III: Exile

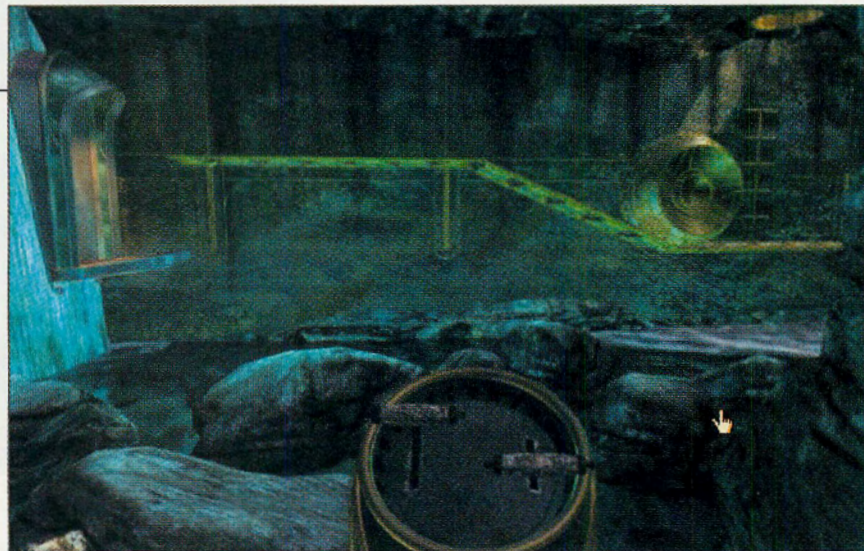
A Classic Takes New Shape

On September 23, 1993, Cyan's *Myst* appeared and took Mac gaming to another realm. It was neither a shooter nor a platform game; *Myst* required no somersaults, no acrobatic kung fu, and no gunplay. Instead, players wandered around a surreal world solving equally surreal puzzles. Returning to the present, *Myst III: Exile* (which should be available by the time you read this) gives players the opportunity to seek out the answers to the mysteries of the worlds they explore. Keeping to the tradition of the series, you won't find any real-time fighting, weaponry, or polygonal figures with enhanced anatomy in *Exile*. So, in a world of real-time 3D games, how does a game like *Exile* stand up to the competition? In short, there's no other game like it.

A New Engine

The first two titles, *Myst* and *Riven*, used slide-show-style navigation. In *Myst*, the graphics, sound, and music were good enough to make

up for static, prerendered images and blocky QuickTime movies. *Riven* had to up the ante in 1997—by then game technology had taken a huge leap. Unfortunately, while the graphics were first class and the audio quality was significantly better than that of the original, *Riven* still presented a



You're looking at a puzzle. Solve it, and you might find a portal to another age.

succession of static images—a slide show by any other name. *Exile* ups the ante again—each location you can explore is now represented by a full 360-degree panorama that you can scan to survey your surroundings (if you've ever used a QuickTime VR panorama, you'll be familiar with the concept). Since all the 3D graphics are prerendered, they are substantially more detailed than the graphics in 3D games that attempt to render scenes in real time—you get beautifully complex scenes instead of hard-edged models with simple textures. *Exile* also added motion within the panoramas: water shimmers and ripples, characters walk and talk (even if you aren't facing them), and the screen shakes when

you, for example, stand inside a vibrating steel tube.

Presto! There Goes Cyan

Somewhat to the surprise of *Myst* fans, Presto Studios (best known for developing the *Journeyman Project* series) developed *Exile*. Since Cyan developed the first two *Myst* games, the company's minimal involvement in *Exile* inspired a fair amount of controversy in *Myst* circles—many die-hard *Myst* fans worried that *Exile* would lose the strong storyline and surrealistic feel that marked *Myst* and *Riven*. Fortunately, Presto closely consulted Cyan during the story development phase, so *Exile* manages to remain true to the *Myst* series.—AT



Didn't your mother tell you you'd go blind if you stared into the sun too long?



Catherine and her daughter are in danger, and it's up to you to save them.



Rand Miller reprises his role as Atrus, who needs your help.



Exile has a new villain: the inimitable Brad Dourif.

Unreal Tournament: Game of the Year Edition

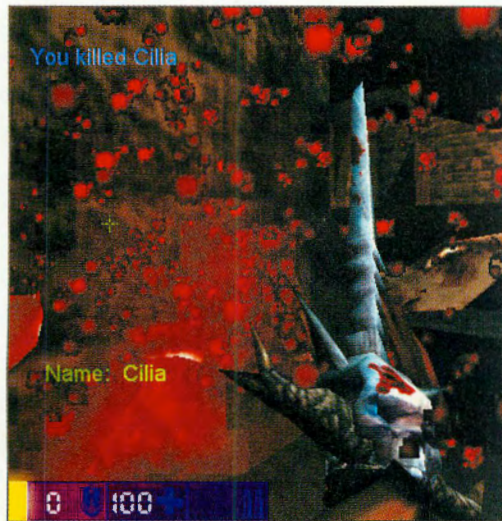
What's in the New Box?

If you're the sort of person who haunts Mac gaming stores, you might have noticed a change in the design of Unreal Tournament (UT) boxes—they now sport a highly redundant title (Game of the Year? Duh!). Beyond the nice new box and much cheaper price (\$19.99 SRP), though, there are some nifty extras on the shiny new disc. For starters, the game is the latest (436) version of UT, so you can stop scrambling for updates when you need to reinstall it. Also, GOTY (Game of the Year) ships with 20 new maps and two of the hottest UT mods around: ChaosUT and Rocket Arena.

ChaosUT brings seven new weapons to any UT map, ranging from a gravity-sucking Vortex, to the wildly indiscriminate, shoot-anything-that-moves Sentry Turrets, to our favorite, the Bastard Sword (and not just because we get to say *bastard*—this sucker can block bullets!). The Sword is no match for the Redeemer, but that's what Sword Arena is for: all swords, all the time.

When you've had your fill of ChaosUT's mystical tricks and mayhem, Rocket Arena is the place to hone your technical skills. A combination of mods and maps, Rocket Arena lets you pick from the full complement of weapons in a series of smaller (dare we call them intimate?) arenas for a little one-on-one or two-on-two gameplay.

If you've played online, you know that all the maps, mods, and updates (in other words, everything that sets GOTY apart from UT proper) come free for the download. Heck, the ChaosUT UMOD is even on this month's Disc. Still, any game that outlives the disc it came on is worth buying again—particularly at such a bargain price.—NC



Bastard Sword: Cool new weapon, same excessive gore.



Find the
ChaosUT
UMOD for UT
on The Disc.

19 Years Later

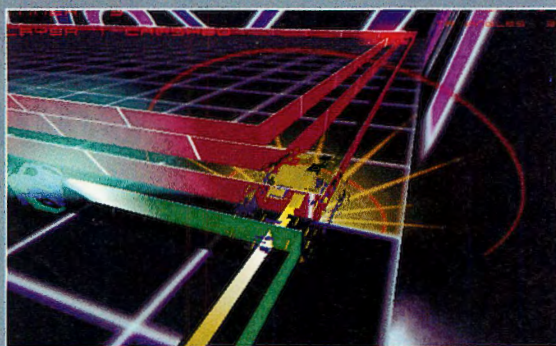
glTron Keeps the Light-Cycle Craze Alive

For those of us old enough to remember (or those who are stalking Jeff Bridges), the Disney film *Tron* married video games and movies in a neon-lined vision. The best part of that movie was the light-cycle scene, in which rounded motorcycles trailing solid walls of light careened around an arena in an effort to cause all the other bikes to crash. In the end, one biker was victorious.

You can relive those moments by playing glTron, a game in which four light cycles go head to head in an OpenGL-rendered arena. Play against the computer or against up to three other players on the same screen. While zipping along, you can view the arena using several different camera modes, but only the Behind mode is useful—otherwise, you won't be able to see where you're going.

Aside from the addictive gameplay, the breathtaking graphics, and the fact that glTron runs in Mac OS 9 and Mac OS X, the best thing about this game is its price:

free. Heck, you can even fiddle with the source code, if you're so inclined—glTron falls under the Gnu Public License. One hint: If you're having problems with the camera view, try pressing F10. This will cycle you through the camera modes while you play.—DR



ROM, was that a User? No, TRON, it was a LUser!

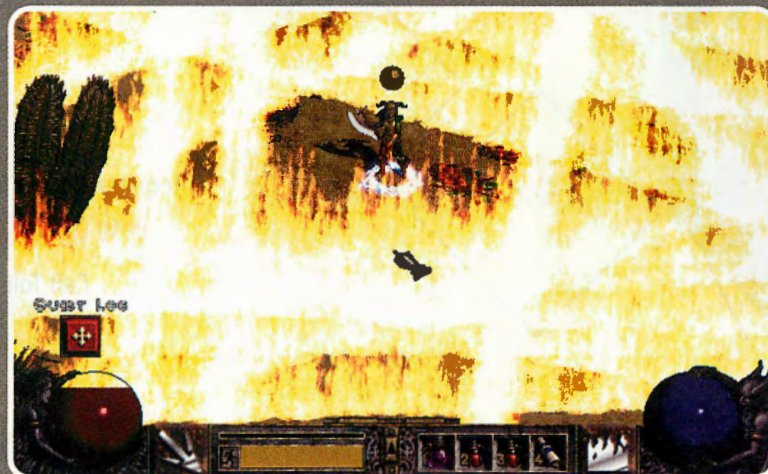
My other Light
Cycle is a Porsche.



Find glTron
0.61 on
The Disc.

SCREENSHOT OF THE MONTH

If you're not supposed to play with matches, then Matt Carlson crossed far, far over the line in this *Diablo II* shot. The map, the map, the map is on fire!



Artist's Statement

I love the smell of napalm in the morning.

Send your best screenshots to letters@macaddict.com with the subject line "Screenshot of the Month" if you crave fame and glory (or at least fleeting satisfaction upon seeing your screenshot in a magazine).

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how to

Suck the Web into Excel and make IDVD themes that don't suck.

INFOGRAPHIX BY W.B. JONES

Get the Web into Excel

by Maria Langer



WHAT YOU'LL NEED

- Microsoft Excel 2001
- A recent Web browser



This stuff's for the pros.



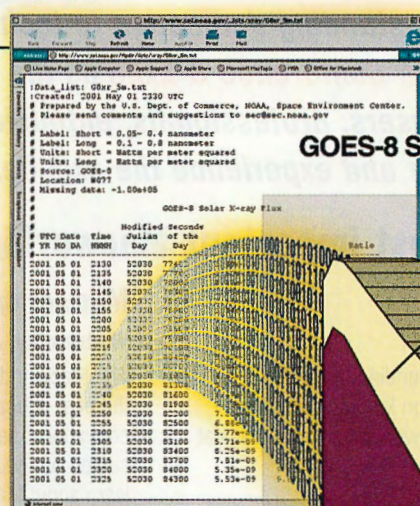
It'll take some effort, but you can do it.



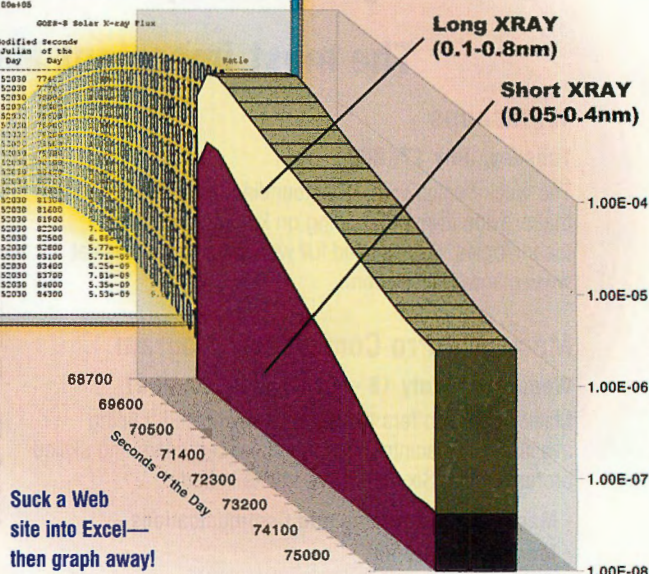
The fundamentals, if you will.

Even if it might not always appear so, the Web contains a lot of good, useful information. Look hard enough, and you'll probably find just the information you need for a report or analysis. Trouble is, that information is inevitably lodged in a Web page with kooky formatting, making it totally unsuitable for that report the big boss requested—just printing it and sticking it in with the other pages of your report would be out of the question! Besides, you know that with some massaging (perhaps some calculations and charts), you could improve the data until it's tailor-made for your purposes.

Don't start flexing your fingers in preparation for retyping all that data. (If you're like some of us, you'll probably make all kinds of typos anyway.) Instead, reach for Excel 2001, which has the uncanny ability to import Web-based data right into a worksheet where you can calculate, sort, edit, format, and chart it. Better yet, Excel will always grab the latest, most up-to-date information available on the Web site. Here's how to do it.



GOES-8 Solar XRAY Flux



Suck a Web site into Excel—then graph away!

1 Find the Page

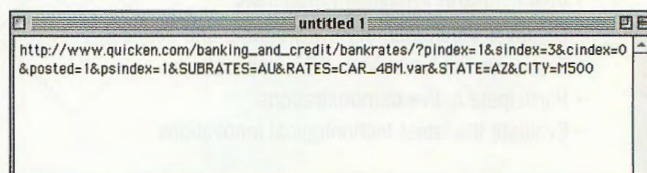
Use your Web browser to display the Web page containing the data you want to use. This will be the source page. For our example, we looked up 48-month car-loan rates for the Phoenix, Arizona, area on Quicken.com. With the page displayed, select the contents of the Address box (where the URL appears at the top of the page), then copy it to the Clipboard (Command-C).

Here's the information we want in Excel. To get here, we went to Quicken.com, clicked a few links, and filled in a form.

Institution Name/Phone	Rate (%)	Fees and Conditions	Date
Chevron FCU (510)627-5160	7.20%	No fee	03/23/2001
PeopleFirst.com (800)689-1769	7.25%	No fee	03/19/2001
PeopleFirst.com (877)284-4446	7.25%	N/A	03/21/2001

2 Paste the URL

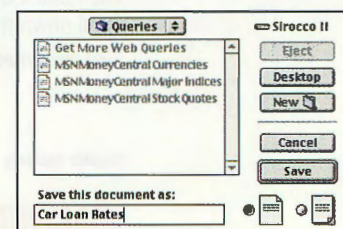
Open your favorite plain-vanilla text editor—SimpleText or TextEdit will do nicely. Then paste the contents of the clipboard (Command-V) into a new document window. Make sure you copied the entire URL, as some of them can be quite long (particularly URLs that include your responses to a Web form); also make sure you haven't added any extra spaces after the URL's last character.



Paste the URL of the source page into a brand-new document window.

3 Save the Query

Save the new document with a name that makes sense to you. If you want to keep all your Web queries in a single central location, you can use the Queries folder that sits in the Office folder inside the Microsoft Office 2001 folder. Microsoft created this folder to house a few sample queries (see "About the Sample Queries," p69), but since Excel looks in the Queries folder first, it's a convenient place to store your own queries.



Save the file inside Microsoft Office's Queries folder.

4 Run the Query

Open Excel 2001 and the workbook file into which you want to copy the Web data. This can be an existing workbook or a brand-new one. Switch to a blank sheet in the workbook and click inside the cell where you want the data to begin. Now choose Run Saved Query from the Get External Data submenu under the Data menu. In the Choose A Query dialog box that appears, select the query you want to use and click Get Data.

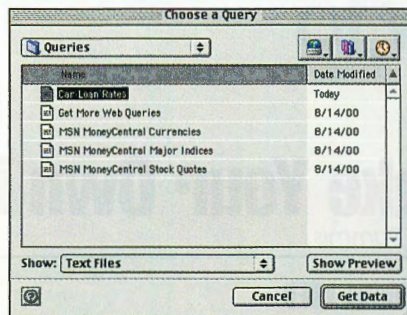
5 Find a Home for the Data

Use the Returning External Data To Microsoft Excel dialog box that appears to specify where you want the data to appear. Then click OK. If you start making large numbers of queries, you'll eventually need to organize them; for now, just dumping them all into Queries should work fine.

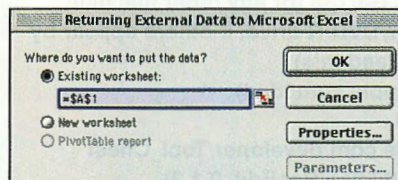
6 Format the Grabbed Info

Wait while Excel connects to the Internet, finds the appropriate page, and copies it into the worksheet. This could take a few moments, so be patient. A message in the status bar will tell you what Excel is up to. When the data finally appears, it might not be pretty. Excel formats the worksheet to fit information in cells; as a result, it might make columns and rows bigger or smaller than you prefer. You can fix up the worksheet by changing column width and row height (do this directly by dragging the lines that separate column or row headers, or a bit more precisely by choosing Width and Height respectively from the Column and Row submenus of the Format menu. You can also delete columns and rows you don't want. (Don't do this if you want to query the Web repeatedly to get updated information; otherwise your formulas might wind up pointing to the wrong cells after a second query replaces the rows and columns you deleted.)

Here's the page in Excel, with column widths and row heights adjusted a bit so the important stuff fits in the window.



Choose the query you want to use.



You can use this dialog box to select a different place for the data to appear; if you want the data to appear in the active cell, just click OK.

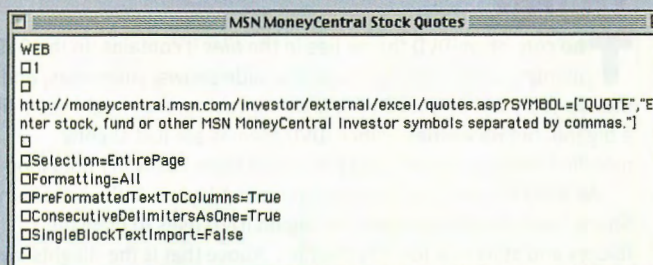
Institution Name/Phone	Rate (%)	Fees and Conditions	Date
Chevron FCU (610)527-5100	7.20%	No fee	3/23/01
PeopleFirst.com (800)890-1789	7.25%	No fee	3/10/01
PeopleFirst.com (877)284-4440	7.25%	N/A	3/21/01
McDonnell Douglas West FCU (800)944-5327	7.30%	Rate range: 7.30%-10.85%	3/26/01
E-Loan (888)224-4057	7.35%	No fee	3/28/01
Xerox Federal Credit Union (800)932-8222	7.54%	N/A	3/22/01
VirtualBank (877)998-2255	7.55%	N/A	3/22/01
Arizona State Savings & Credit Union (802)255-4428	7.60%	No fee	3/10/01
SunWest Federal Credit Union (800)352-4085	7.60%	N/A	3/26/01

About the Sample Queries

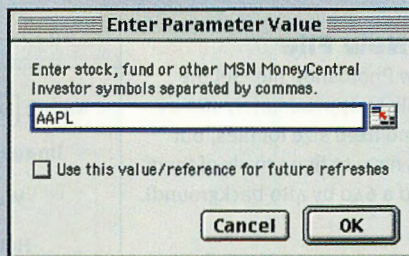
Excel comes with a few sample query files you might want to check out on your own. Before you open these up and dissect them to see exactly how they work, though, there are some things you need to know.

The sample files were created for the Windows version of Excel, which supports more parameters than the Mac version. The Mac version supports the first two lines of the query, which represent the type and version, but since there's only one option for each parameter, you can safely omit them from your own queries. Excel 2001 simply doesn't support the lines of the query after the URL (the ones dealing with selections and formatting). Don't bang your head against the wall trying to get them to work (as we did for a while)—all you'll end up with is a headache.

The other thing you may see in some of the samples is a *dynamic post parameter* within the URL. This sounds terrifyingly complex, but all it means is that Excel will ask you for information before it grabs Web information. For example, "QUOTE", "Enter stock, fund or other MSN MoneyCentral Investor symbols separated by commas." tells Excel to prompt you to enter a stock symbol. The symbol you enter completes a post method URL (in other words, a Web form). Using a dynamic post parameter makes it possible to interact with the Web query as you use it.



Here is one of Excel's sample queries. It looks up a stock quote based on a symbol you enter in a custom dialog box. Those little squares are line-feed characters, which Windows machines require but Macs ignore.



When a URL includes a dynamic post parameter, Excel displays a form you can use to enter specific information.



Make Your Own iDVD Themes

by Ian Sammis

WHAT YOU'LL NEED

- A Power Mac G4/733 (or any other machine with a CD-RW/DVD-R drive, if others appear by the time you read this)
- iDVD (www.apple.com/iddvd)
- ResEdit 2.1.3 ([ftp://ftp.apple.com/developer/Tool_Chest/Developer_Uilities/ResEdit_2.1.3](http://ftp.apple.com/developer/Tool_Chest/Developer_Uilities/ResEdit_2.1.3))
- Adobe Photoshop 6.0 (\$609, www.adobe.com)
- Artistic talent (optional, unless you dislike people laughing at you)



Find the Classic Environment theme on The Disc.

Anyone lucky enough to have purchased a Power Mac G4/733 with a SuperDrive has a treat in store. Apple's iDVD program makes it easy to create a DVD that will work on any standard player. Unfortunately, you'll quickly realize that unless you want to follow one of Apple's prebuilt themes, there are strict limits on the amount of customization you can do. While the software does allow you to add your own background, you'll have to use one of a mere handful of tile shapes (the artistic effects that surround your submenus, slide shows, and movies), and if you want to lay out the tiles in any way other than the neat little rows Apple prefers, you're out of luck. This is a shame—a quick look at some of Apple's more clever themes like Sand (with its lines-in-the-sand tiles) leaves you wanting tools you simply don't have.

Ah, but are you *really* missing the tools? With Photoshop, some basic design skills, and a copy of ResEdit, you can build your own themes—ones that really let you express your individuality (or at the

TILING

The core of an iDVD theme lies in the *tiles* it contains. In the DVD menu system, tiles represent the slide shows, submenus, and movies you store on your DVDs. Creating custom tiles might seem like a big job, but no worries—since iDVD themes are just slightly modified Photoshop files, you can create them easily in Photoshop.

An iDVD tile consists of three Photoshop layers. At the base is the Shape layer, which describes the region iDVD uses to draw the folders and stills that identify the tiles. Above that is the Highlights layer (the odd spelling is Apple's, not ours), which contains the artistic effect surrounding the shape. Finally, a Select layer on top indicates which portions of the image to fill with yellow when viewers select a tile (this works much like a JavaScript rollover).

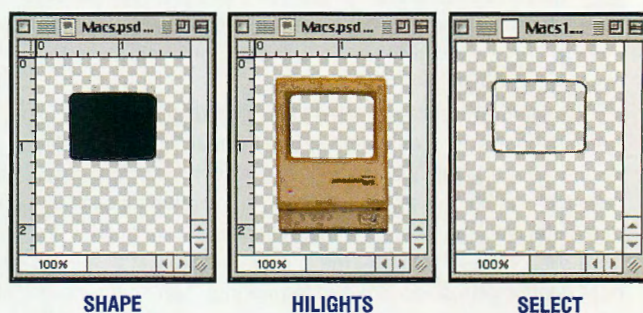
1 Open a New File

Create a new Photoshop file. Set the size of the file to approximately 180 by 150 pixels (there's no fixed size for tiles, but remember that you have to fit up to six of them along with text onto a 640 by 480 background).



What good is it to be a Mac addict if you can't put Macs in your DVD themes?

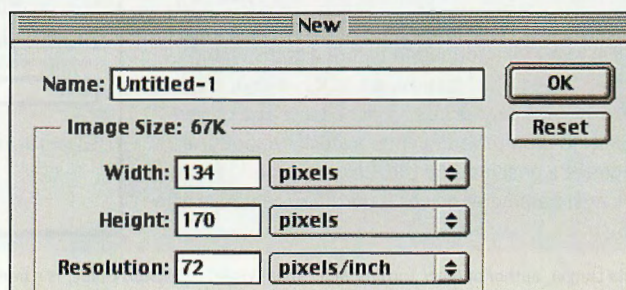
very least your lack of artistic talent). Follow along as we take you through the process of creating an iDVD theme based around some old friends: the Apple IIc, the Mac Plus, and the Macintosh Classic. We'll start by building the tiles, then we'll add the additional resources that turn a Photoshop file into an iDVD theme.



SHAPE

HIGHLIGHTS

SELECT

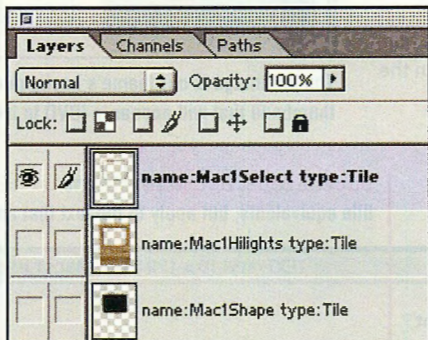


For the six computers in our theme, we chose a tile 134 pixels wide and 170 pixels high.

2 The Three Layers

Choose Layer from the New submenu of the Layer menu to create a new layer. The name of the new layer is extremely important—it must be in the form `name:tilenameShape type:Tile` (you should replace *tilename* with the name you want to give the tile). Give it a simple name like `MyTile1` that consists only of letters and numbers with no spaces.

Create two more layers with names like this: `name:tilenameHighlights type:Tile` and `name:tilenameSelect type:Tile`. Use exactly the same tile name for all three layers—if you don't, you'll get an unpredictable effect at best. When you've created all three layers, select the Background layer and choose Delete Layer from the Layer menu to remove it. Your image should now appear with a grayscale checkerboard pattern to indicate that the entire image is transparent.

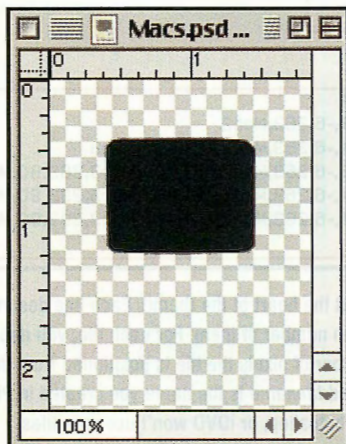


The naming of the layers is very important—a misspelling can keep the theme from working at all.

3 Draw a Shape

Select the Shape layer in the Layers palette. The Shape is a black image that tells iDVD which portion of each tile to replace with the image representing the submenu, slide show, or movie you're placing. Make this area big enough to let viewers of your DVD easily see what each tile represents. Leave blank any area you don't want replaced.

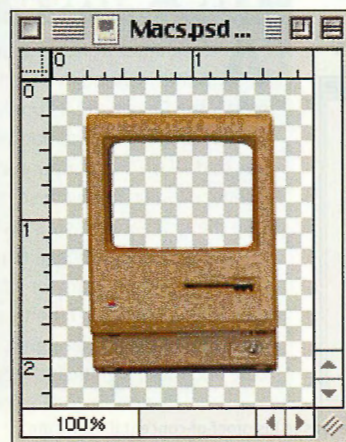
The black area here represents the area iDVD will use to draw its still frames and folder graphics.



4 Draw a Highlights Area

Now select the Highlights layer. It contains the image that surrounds the Shape—the sand lines in Sand, for example, or the scraps of paper in Wanted. Be sure not to cover over the area you shaded in the Shape layer, or you won't be able to see iDVD's still frames and picture elements.

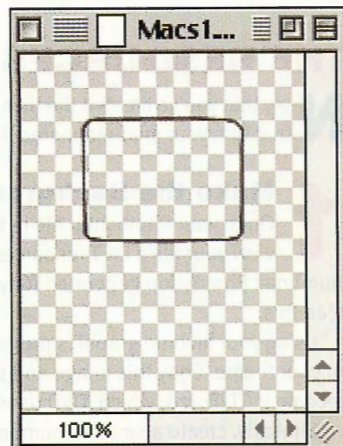
If we hadn't cut the screen area out of this Highlights image, iDVD wouldn't be able to draw there—the Highlights layer would cover the Shape layer.



5 Draw the Selection Effect

Finally, choose the Select layer and fill in the image areas that should turn bright yellow when the viewer selects the tile. You may find it easier to draw this using a yellow fill color so you can see the ultimate iDVD effect. In our theme, for example, we created a yellow outline around the screen of the selected computer.

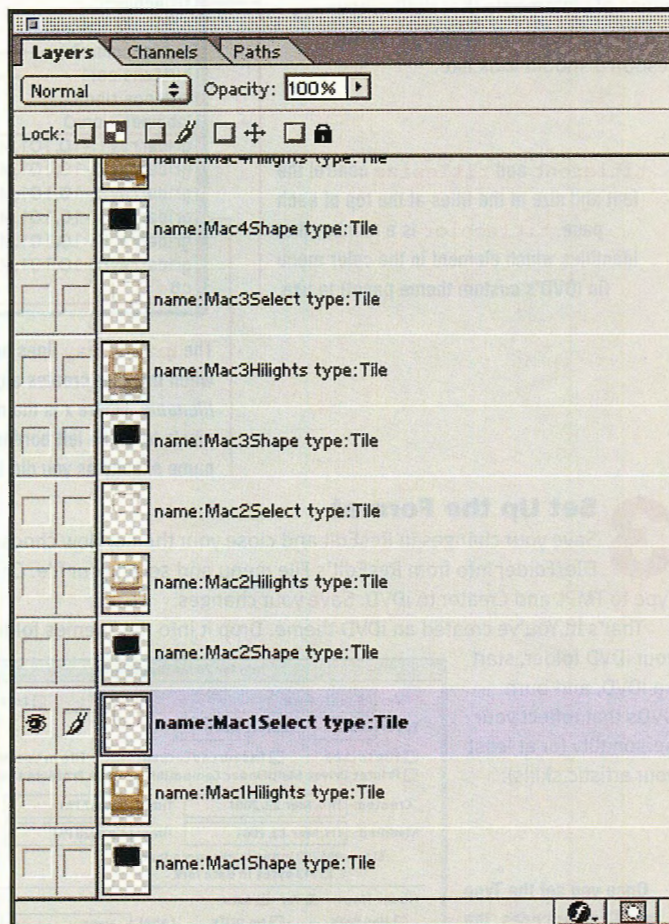
Although the outline looks black in the Photoshop file, iDVD will color it yellow.



6 Draw Any Additional Tiles

You can use more than one type of tile—Apple's Chalkboard theme has six. For each tile, create another three layers with names structured just like those in step 2. Our Classic look uses six tiles—one for each computer that forms the theme. Don't bother creating more than six—that's all iDVD supports.

When you're done creating your tiles, save the tiles and quit Photoshop. Now you'll add the extra images and instructions that will turn your Photoshop file into a theme.



We created six tiles for our theme—one for each of the computers (the slightly different camera angles kept us from just replicating a single computer six times).

THE RESOURCES

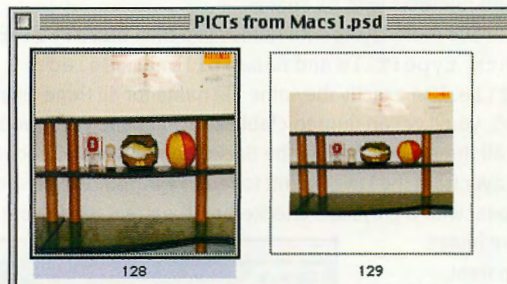
Now that you've created the tiles, it's time to make the modifications that turn your mild-mannered Photoshop file into an iDVD theme. To do this, you'll need the help of a resource editor. If you don't have a copy of ResEdit, go to Apple's FTP site and download a copy.

1 Make the Background a Thumbnail

Open your Photoshop file in ResEdit, then double-click the PICT icon to view your file's PICT resources. You'll see a single resource containing the thumbnail Photoshop generated for your file. Click it, then click delete—you won't need this.

Using your favorite graphics program, create a 640 by 480 background image for your theme. Copy this image and paste it into ResEdit. The image should become PICT ID 128, which iDVD uses for your image's background.

Similarly, create a smaller thumbnail image (116 pixels wide by 87 pixels high), and paste it into ResEdit to create PICT ID 129; iDVD will display this image in the Themes strip to show what theme it is.



The left image is our theme's background; the right is the thumbnail that will appear in iDVD to identify our theme.

2 Create the Layout

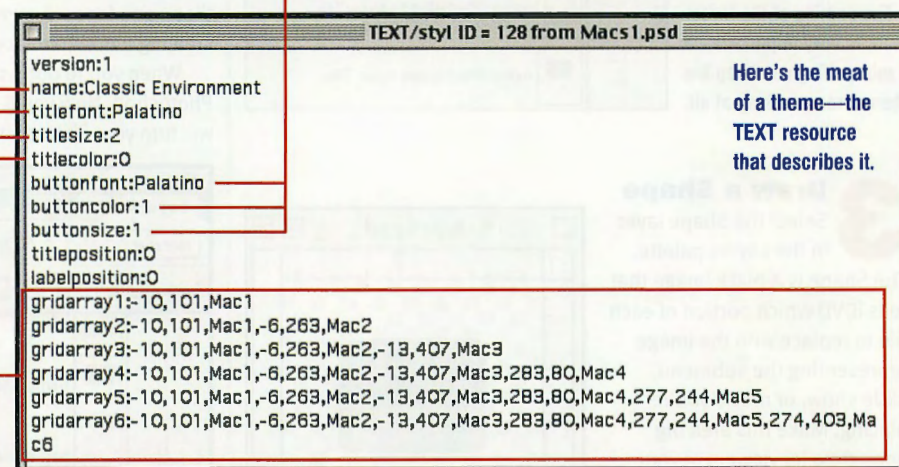
Pull your socks up—this is the tricky bit. Create a TEXT resource by choosing Create New Resource from the Resource menu. Make the new resource ID 128.

In the TEXT resource, you'll type a series of statements that define how the theme behaves. Here's what the resource should look like:

titlefont and **titlesize** control the font and size of the titles at the top of each page. **titlecolor** is a number that identifies which element in the color menu (in iDVD's custom theme panel) to use.

The **name** line tells the theme what its name is.

buttonfont, **buttonsize**, and **buttoncolor** are just like their title equivalents, but apply to the text that appears near the buttons.



Here's the meat of a theme—the TEXT resource that describes it.

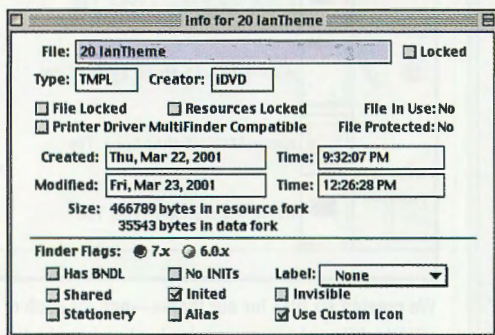
The **gridarray** lines are at the heart of the theme. Each line describes how iDVD will lay out the tiles when the user creates a given number of them. For each tile, you need to type a string of the form *x, y, tilename*, where *x* is the number of pixels the tile is positioned from the top border, *y* is the number of pixels from the left border, and *tilename* is the name you created in Photoshop. Make sure to type the name exactly as you did in Photoshop, or iDVD won't use your tiles.

3 Set Up the Format

Save your changes in ResEdit and close your theme. Now choose Get File/Folder Info from ResEdit's File menu and select your file. Change Type to TMPL and Creator to iDVD. Save your changes.

That's it! You've created an iDVD theme. Drop it into the Themes folder in your iDVD folder, start up iDVD, and burn DVDs that reflect your personality (or at least your artistic skills).

Once you set the Type and Creator codes, the Photoshop file becomes an iDVD theme.



Ian Sammis is very grateful that no one will ever see his proof-of-concept iDVD theme.

The Glitch Hitch

After all that work, we discovered a problem with our theme—although it worked perfectly in iDVD's preview mode, the Select effects on the top three computers didn't display properly on the burned DVD. We suspect the glitch has to do with the computers' positions at the very top of the interface. (In fact, they're so close to the top that we had to give them negative distances from the border!)

This sort of irritating glitch is fairly common when you're trying to use a program for a task that's totally unsupported (like making new DVD themes!). When you finish a theme, you should test it thoroughly, or the recipients of your DVDs may find them significantly less impressive than you'd hoped.

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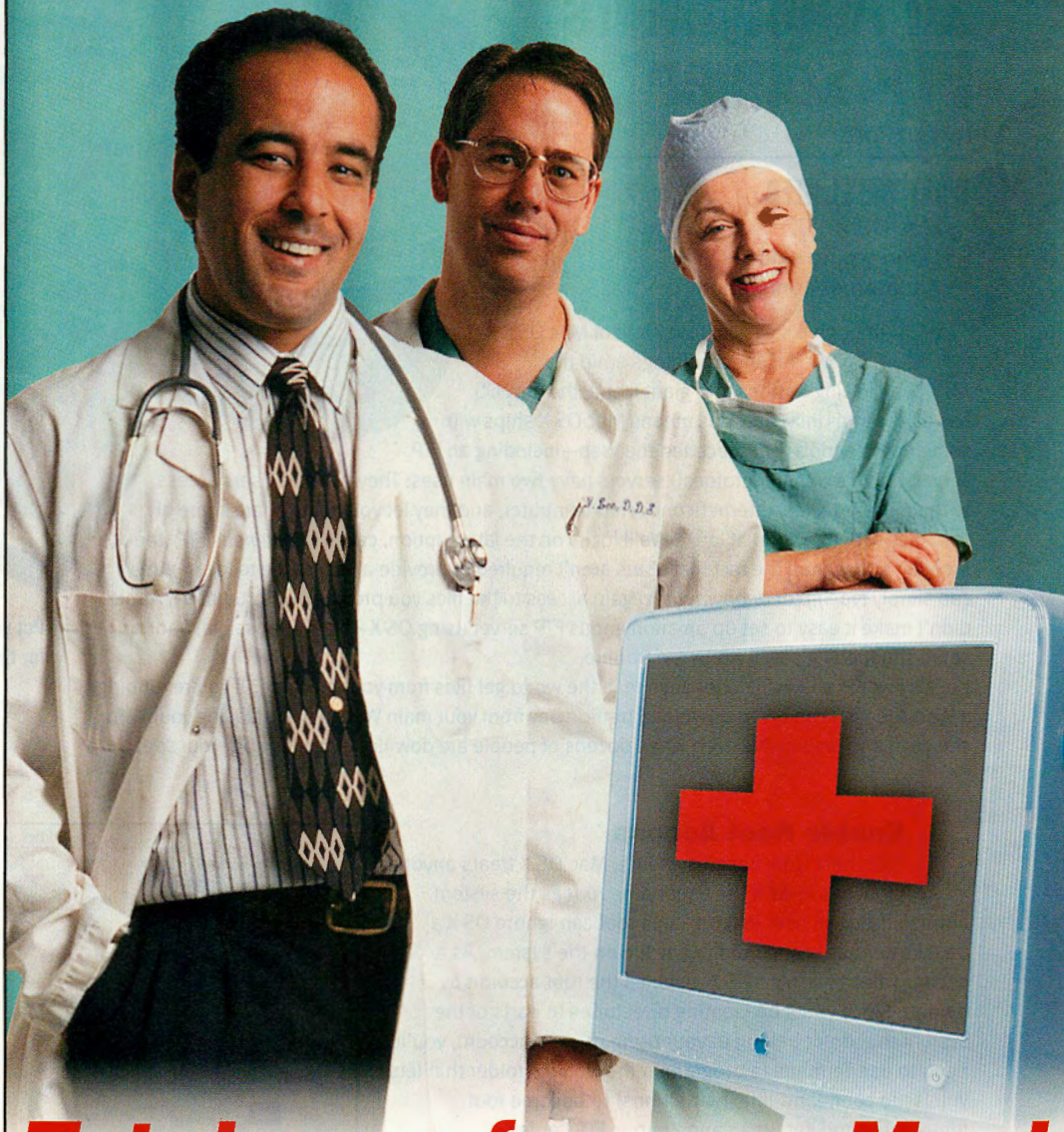
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Use Mac OS X as an Anonymous FTP Server

by Buz Zoller

WHAT YOU'LL NEED

- Mac OS X
- Good typing skills
- An Internet connection

Although it's easy to lose sight of Mac OS X's powerful underpinnings amid the glowing buttons and giant icons, the new OS has a powerful Unix core. This means Mac OS X ships with some humble tools that preceded the Web—including an FTP server. FTP (file transfer protocol) servers have two main uses: They can give users access to their files from any Internet-connected computer, and they let you opt to share some of your files with the world at large. We'll focus on the latter option, called *anonymous FTP* (the moniker stems from the fact that users aren't required to provide a user name to log in—they can simply type *ftp* or *anonymous* to gain access to the files you provide). Unfortunately, Apple didn't make it easy to set up an anonymous FTP server using OS X—but it *is* possible, and in some situations it's well worth the trouble.

Why would you want to let anyone in the world get files from your machine? If you're running a Web site, you can divert download traffic away from your main Web server—leaving your Web site crisp and responsive even when dozens of people are downloading files from your site.

1 Enable Root Access

Like most Unix-based systems, Mac OS X treats anyone who logs in with the user name *root* as the system administrator—a user logging in as *root* can ignore OS X's usual safeguards and modify any file on the system. As a security measure, Mac OS X disables the *root* account by default. Since you'll be creating directories in parts of the system that don't belong to your ordinary user account, you'll need to use Terminal (a program in the Utilities folder that lets you issue command-line instructions) to become *root* temporarily and set up an anonymous FTP server.

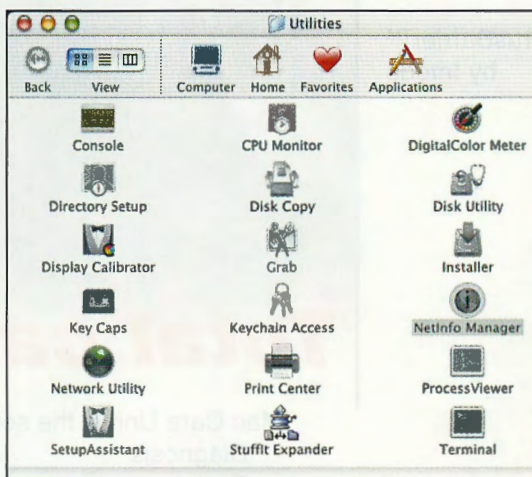
To enable the *root* account, open the NetInfo Manager (if you haven't moved it elsewhere, it should be in the Utilities folder of the Applications folder). Choose *Authenticate* from the Security submenu of the Domain menu. Enter your administrator password in the dialog box that appears.

Next, choose *Enable Root User* from the Security submenu of the Domain menu. Now you can log in as *root* in the Mac OS X log-in screen (do not do this for everyday work—becoming *root* disables all the normal safeguards that keep you from inadvertently causing damage to the system), and you can use the *su* command in Terminal to become the *root* user (we'll discuss this later).

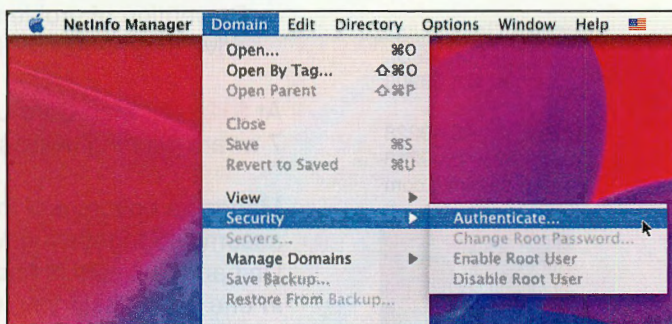
You need an admin password to activate the root account (if you didn't, the security wouldn't amount to much!).



Put your goodies out there for the world to see!



The Utilities folder contains many cool goodies, including the two applications you'll need for this job: Terminal and NetInfo Manager.



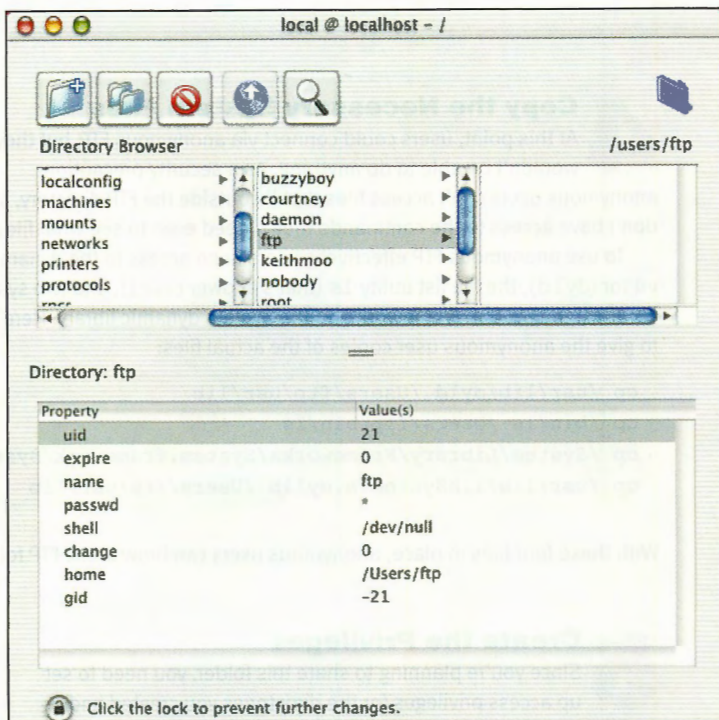
2 Create the FTP User

To allow anonymous FTP, you'll create a user called *ftp* that will represent anonymous users connecting to the FTP server. You'll have to use the NetInfo Manager program once again to create this user—the Users preference panel doesn't let you set up unusual users like this FTP account.

Launch the NetInfo Manager application and click the padlock icon in the lower-left corner of the window to unlock the NetInfo database. (You'll have to enter your admin password in the dialog box that appears.) Highlight the Users folder in the middle column and click the button for creating a new directory, located in the upper-left corner of the window (it looks like a folder with a plus sign). Change the name of the directory to *ftp* in the lower panel of the window by double-clicking the words *new_directory*, then typing *ftp*. Next, choose New Property and New Value repeatedly from the Directory menu to create the properties and values, shown right (the order of the properties isn't important; just be sure that you correctly match the values with the properties). When you're done, save your changes (choose Save from the Domain menu), then quit.

The home directory for anonymous FTP can be anywhere, but we'll assume you sensibly put it in an FTP directory in the Users directory. It is also important to set the password to an asterisk (*)—this lets anonymous users connect sans password.

Replicate these settings for your own FTP user.



3 Create the Directories

When you first install Mac OS X, the new system creates a folder called Users at the root-level startup disk. This is where Mac OS X stores all of your user's home directories. Unless you are logged in to your system as root, you will not be able to create the directories needed for anonymous FTP access—the Users folder itself belongs to root. The quickest way to create these directories is to work inside Mac OS X's Terminal command line.

Launch the Terminal application from the Utilities folder. If you've never used a command-line interface before, this will be a new experience—instead of setting up fields, radio buttons, and check boxes, then clicking buttons to make things happen, you'll be issuing a series of text-based commands. To indicate that it is ready to accept input, Terminal will print a *prompt*—usually a short piece of text ending in a symbol such as a percent sign (%). When Terminal gives you a prompt, type *su*, then enter your admin password (Terminal should specifically prompt you for it) and press Return. You now have superuser access; the system will attempt to follow any instruction you issue, no matter how potentially destructive. To remind you that you're running with scissors, the prompt should now end in a hash mark (#).

The first thing you'll do is create the folder structure for enabling anonymous FTP. Change directory (*cd*) to the Users folder by typing *cd /Users*. Then enter the following commands:

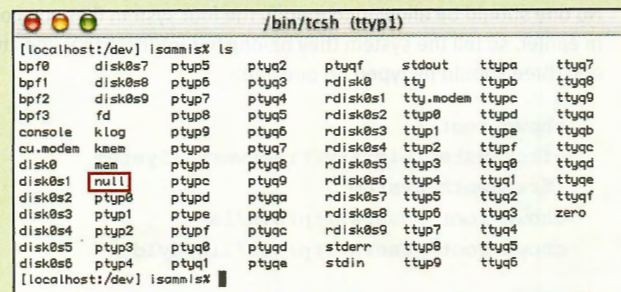
```
mkdir -p \
-ftp/System/Library/Frameworks/System.framework
mkdir /Users/ftp/bin
mkdir -p /Users/ftp/usr/lib
mkdir /Users/ftp/incoming
mkdir /Users/ftp/pub
```

Press Return after you finish typing each line. The *-p* switch tells the system to make all the intermediate directories if they don't already exist. When you're done, browse through the folders you just created in the Finder and make sure they look as they should (see right).

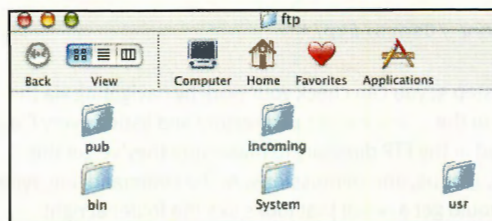
Whad'ya mean, /dev/null?

Anytime you create a user, you have to worry about someone exploiting that user's existence to sneak onto your system illegally. To make taking advantage of the FTP user a bit trickier, you set the user's *shell*, or the program that runs when the user first connects (usually *tcsh* for Mac OS X users), to */dev/null* when you enter the properties and values shown below.

The file */dev/null* is the Unix equivalent of a black hole—it throws away any text you try to add to it. Even if an evil hacker somehow manages to log in as FTP, he or she won't be able to use */dev/null* to do anything productive (or—from your point of view—counterproductive).



That *null* is like a data motel—data goes in, but it doesn't come out.



This is what the FTP directory should look like in the Finder after you create the directories in the Terminal.

4 Copy the Necessary System Files

At this point, users could connect via anonymous FTP, but they wouldn't be able to do anything. As a security precaution, anonymous users can't access files that lie outside the FTP directory, so they don't have access to the commands they'd need even to see what files exist!

To use anonymous FTP effectively, users need access to the dynamic link editor (**dyld**), the file list utility **ls** (that's a lower case **L**), and two system libraries: the System Framework and the System dynamic library. Here's how to give the anonymous user copies of the actual files:

```
cp /usr/lib/dyld /Users/ftp/usr/lib
cp /bin/ls /Users/ftp/bin/ls
cp /System/Library/Frameworks/System.framework/System ~ftp/System/Library/Frameworks/System.framework
cp /usr/lib/libSystem.B.dylib /Users/ftp/usr/lib
```

With these four files in place, anonymous users can browse the FTP folder to their hearts' content.

5 Create the Privileges

Since you're planning to share this folder, you need to set up access privileges for the directories you created and the files you copied. In Unix, you set access privileges with the **chmod** (change mode) command (see "chmod, chown, chgrp, chwhatheheck?," p78). Here's how to do it.

First, set permissions with the following commands:

```
chmod -R 555 /Users/ftp/System
chmod 555 /Users/ftp/bin
chmod -R 555 /Users/ftp/usr
chmod 755 /Users/ftp/pub
chmod 733 /Users/ftp/incoming
```

Next, change the ownership of everything you created to the user ID of the person who will be administering the FTP site (in this case, it's **buzzyboy**):

```
chown -R buzzyboy /Users/ftp/*
```

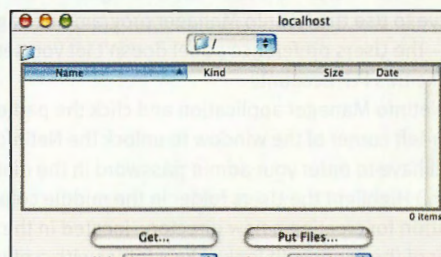
No one should be allowed to modify the four system files you copied in earlier, so tell the system they belong to root (note that lines two and three should be typed on one line):

```
chown root \
~ftp/System/Library/Frameworks/System
.framework/System
chown root /Users/ftp/bin/ls
chown root /Users/ftp/usr/lib/dyld
```

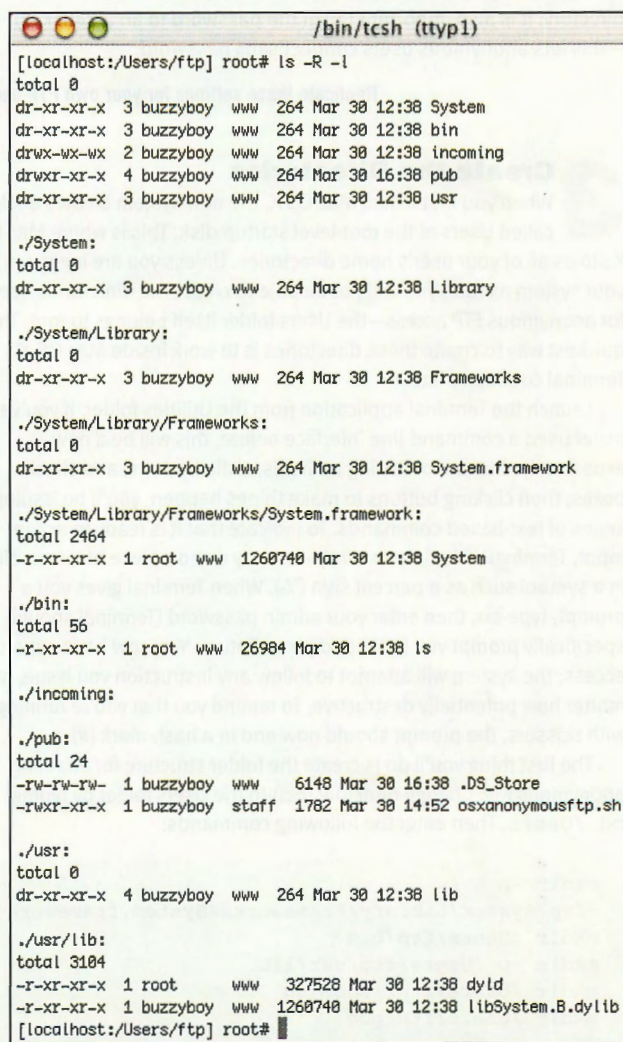
And finally, set everything in the **/Users/ftp** directory to belong to the **www** group to make sure it's all available to the outside world:

```
chgrp -R www /Users/ftp/*
```

After finishing step 5, you can check your work by navigating via the command line to the **/Users/ftp** directory and listing every file and folder contained in the FTP directory to make sure they've got the correct owners, groups, and permissions. At the command line, type **ls -R -l**. You should get a result that looks like the folder at right.



Um...hello? Without a copy of **ls** anonymous users can use, FTP isn't a very useful tool!



Here's what the FTP folder should look like when you're done. Instead of **buzzyboy**, of course, this folder will bear the user name of your FTP admin—or your own name, if this is your box.

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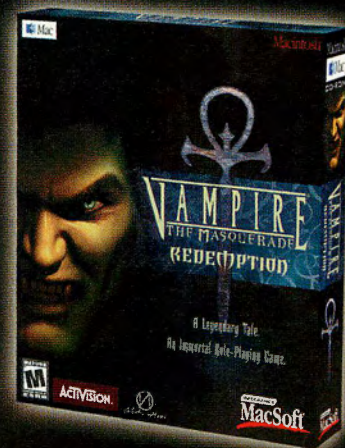
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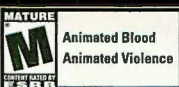
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chmod, chown, chgrp, chwhatheheck?

Just as in the old days of AppleShare, every file on a Unix box is attached to some attributes that tell the system who can play with the file. Each file has an owner, a group, and permissions that tell the system who does and doesn't have access to that file.

The user attribute is the easiest to understand—it simply tells the system which user “owns” the file. To change a file's owner, you use the **chown** (change owner) command, which looks like this:

```
chown user name file name(s)
```

If you shove a **-R** right after **chown**, that command will tunnel through any folders you name and change the owners of all the files and folders inside. Of course, you can't change the owner of any file you don't have permission to modify!

The group attribute works much as it does under AppleShare—it lets you specify a single group to which a file belongs; users in that group can then have different permissions from anyone else. Changing a file's group is just like changing its owner—you just use the **chgrp** command instead of **chown**.

In Unix, each file has permissions for three types of users: the owner of the file, users who don't own the file but are in the file's group, and everybody else. You can tell the system to allow or not allow each of these three types of users to read the file, modify the file, or attempt to execute the file. If you're modifying a directory instead of a file, the latter permission instead confers or denies the ability to peek into the directory and see what's inside.

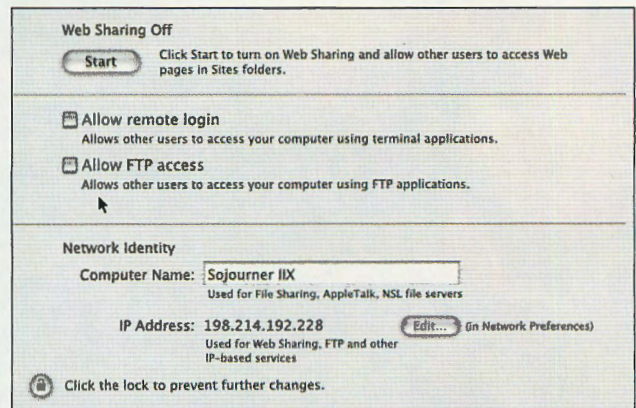
Actually **setting** the permissions is the job of the highly confusing **chmod** (change mode) command. There are two forms of **chmod**. In this how-to, you use the form that sets all permissions at once. In this form, **chmod** instructions look like this:

```
chmod three-digit number file name(s)
```

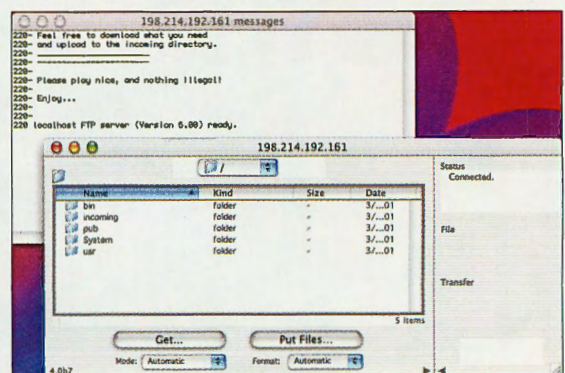
The three-digit number consists of a digit for the file's owner, followed by a digit for the folks in the same group, followed by a final digit for everyone else. To figure out what digit to type, start with 0, then add 1 if you want the file to be executable (or the directory to be searchable). Add 2 if you want the file or folder to be changeable. Add 4 if you want the file or folder to be readable. For example, if you look back at step 5, you changed the permissions of a number of folders to 555. Setting the permissions to 555 told the system that everyone should be able to read (4) and search (1) the directories that appeared in the command (like **chown** and **chgrp**, **-R** tells **chmod** to apply the changes to every file and folder contained within the folders—it's the equivalent of the old Copy Permissions To Enclosed Folders button in previous versions of the Mac OS).

6 Start or Restart FTP

Start FTP by checking the Allow FTP Access check box in the Sharing Preference Panel. If FTP access was already running, you'll have to shut it down first, then start it back up again to let the new settings take effect. To shut down the server, uncheck the Allow FTP Access check box, quit the Preferences application, then relaunch the app and check the check box again. The FTP server should now be up and running, and you should be able to log in as anonymous!



To start the server, you just click a check box.



This is what your anonymous FTP server should look like if you connect to it with Fetch.

Security!

Now that you've got an FTP server running, you'll have to think a bit about security. Here are a few tips:

- Never connect to your FTP server using an admin account. FTP transmits the passwords as plain text—so unless you want to just hand over the keys to your system to every bozo with a packet sniffer, create a new account without admin privileges if you want to dump files onto your system. Better yet, use the incoming directory in the anonymous FTP directory.
- Keep an eye on the incoming directory—the way we've set things up in this article, anyone can dump stuff in there.
- Watch the logs for suspicious activity. Everything an FTP user does is noted in `/var/log/ftp.log`.

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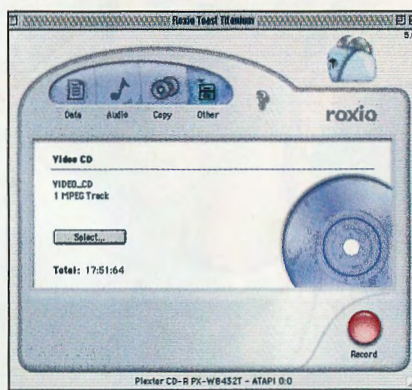
Find CoolCam 1.8 and a SiteCam 6.0.5 demo on The Disc.

Q The new G4s with their DVD-burning SuperDrives are amazing, but alas, they are also very expensive. I've already got a CD burner and would love to know how to make Video CDs on my iMac.

A Video CD is a standard video format in which video files are compressed as MPEG-1 files and stored onto standard data CDs. These CDs play full-length movies on regular TVs, just like DVDs. While it's almost impossible to find a dedicated Video CD player on the market in the United States, you can still watch Video CDs on most commercial DVD players and computers with CD-ROM drives.

In the past, trying to create a Video CD was a daunting task. While a Video CD is nothing more than a standard data CD containing MPEG-1 files, even the smallest mistakes in the directory structure or the compression type will leave you with unplayable Video CDs. That has changed with the release of Roxio's Toast Titanium 5

(\$89, www.roxio.com), a new product that automates all the required compression and organization. With Toast Titanium 5, all you have to do is drag a QuickTime movie



Creating Video CDs has never been simpler.



ILLUSTRATION BY S. BRITT

onto the Toast window, then click the Start button. This process takes some time (Toast has to first compress video, then burn a CD—both of which are very time-consuming tasks!), but you end up with a Video CD.

Unfortunately, this isn't the end of the story. While you can easily play a Video CD on your Mac by downloading a free VCD player like Nathan Sturtevant's FreeVCD (www.cs.ucla.edu/~nathanst/freevcd), you'll probably run into trouble when you try watching your Video CD on a commercial DVD player. Most DVD players that claim to run Video CDs have trouble running Video CDs created on CD-R media. For more information, head on over to www.vcdhelp.com, a great Web site devoted to helping users with Video CD issues.

The Ten-Step Computer Cleanliness Course

Q My mother is a neat freak and is always hounding me about cleaning my computer. Her birthday is coming up, and I'd love to surprise her by cleaning all the family Macs. Can you give me some pointers on how to best clean our equipment?

A Sure! Here are ten quick tips for keeping that equipment clean.

- 1 Rub a fabric softener sheet on the keyboard to prevent static from attracting dust.
- 2 Use compressed air to blast out existing dust inside your keyboard.

3 If you want to use a vacuum cleaner, make sure to use it with the brush attachment to avoid dings.

4 Use a solution of ammonia diluted with lots of water for the plastics.

5 For monitor screens, use a soft cloth moistened only with water. Many glass-cleaning products are too harsh for the coating on monitors.

6 Clean laptop screens the same way, but be very gentle—laptop screens can't take the abuse that CRTs can.

7 iMacs are very difficult to get into and clean. If your iMac resides in an especially dusty environment, consider taking it to a

pro to disassemble and clean the inside.

8 For rolling mice, make sure the rollers inside are free of lint, dust, and the usual mousepad gunk. The traditional way to clean the rollers is to wipe them with Q-tips soaked in rubbing alcohol.

9 If it's been some time since you last cleaned your mouse, the mouse ball itself may be dirty. Wipe it clean with a cloth (if you're in a hurry, just rub it gently on the carpet).

10 Clean your machine regularly—the dirtier you let it become, the harder it is to get it clean again when you finally redevelop a sense of aesthetics.

Q Mac OS X is a truly rocking operating system. I heard there was a way to get to the command line without even touching the Finder. Is this true? I'd love to freak out some of my PC friends by running my Mac in a full-on command-line environment.

A While the Terminal application meets the needs of most people who want a command line, Apple provided a way for purists to leave Aqua behind completely. All you have to do is log out, then log in with Name set to `>console` and an administrator's password. This will dump you directly into the command line. When you want to get back to the full-fledged GUI, type `logout` or `exit`.

Q Last night my iMac running Mac OS X crashed. When I rebooted, all of the icons became generic icons (just blank paper and generic tools, instead of the custom icons that programs and documents usually have), and some of my applications will not launch. I remember that in Mac OS 9 this called for a simple desktop rebuild. This doesn't work in Mac OS X—how do I get the real icons back?

A You do have to rebuild your desktop, but under Mac OS X it's a bit trickier than just holding down Command-Option at startup. Unlike older Mac OS versions, Mac OS X gives each user a unique desktop database. The new operating system keeps track of desktop-type information in three files named `LSSchemes`, `LSClaimedTypes`, and `LSApplications`; you'll find them in the Preferences folder of your home directory's Library folder. To rebuild the desktop, trash these three files, log out, and log back in again. Your icons should now be correct, and your applications should behave normally.

Q My iBook is happily humming away in Mac OS X, and I really love it. The problem is that installing software is a real pain. Most of the software I download is in disk-image format and doesn't come with an installer. The instructions usually say to just copy it to your hard drive or your Applications folder. This is a hassle. There has to be an easier way to install software.

A Software installation in Mac OS X is still in its infancy. The system is still too new to have settled on a few mature installers as Mac OS 9 has, so you're likely to run into a

Doin' the Webcam

Q I purchased a DV camera, which I use to make iMovies. Recently, I thought how cool it would be to set up a Webcam in my house. I've already got the DV camera and FireWire on my Mac—is this enough, or do I need to buy a real Webcam?

A You have more than enough! Any FireWire-enabled Mac will accept a DV signal that video applications equipped for standard QuickTime inputs can use. If you just want a bare-bones Webcam, check out Evological's CoolCam (\$20, www.evological.com), a friendly little shareware app that uploads images to a Web site at predefined intervals. If you have a broadband connection that can handle a high-quality, full-motion Webcast, nothing beats NuSpectra's SiteCam 6.0 (\$149, www.nuspectra.com). Although SiteCam is expensive, it has lots of options for streaming video and images to a Web browser, and is even available for Mac OS X.

Webcams are the tip of the iceberg—once you've got a video stream, you can do much more with it! For example, you could take part in online videoconferencing with Eyematic's iVisit (free beta, www.ivisit.com),

wide variety of options: Carbonized versions of Mac OS 9 installers, disk images, Mac OS X-style packages, and plain old folders. While the situation will improve with time, you can take some steps right now to speed up your installations.

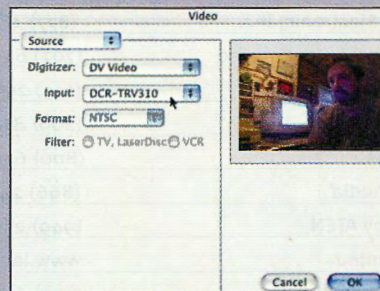


To install an application in Mac OS X, just drag it to the Applications folder in the Finder toolbar.

Buz Zoller is a technology support specialist for a school district in Texas.



Run a full-motion Webcam with Mac OS X and a DV camera.



If you've got the right hardware and software, your camera will show up as a Source option in either Mac OS 9 or Mac OS X.

import live video straight into Apple's iMovie (freeware, www.apple.com/iMovie), or even attempt serious editing in a pro package like Apple's Final Cut Pro (\$999, www.apple.com/finalcutpro) or Adobe Premiere (\$549, www.adobe.com/products/premiere/main.html).

The easiest way is to change the contents of the little toolbar that appears at the top of each Finder window. Although it's not immediately obvious, you can drag your own folders into the toolbar. Better yet, once they're in the toolbar, you can drag other files into toolbar folders; they behave just like folders in Finder windows. To speed up installations, just drag the folders where you want to store your apps into the Toolbar.

Now that your new apps' destinations are in the toolbar, you can perform installations in seconds. Mount the disk image by double-clicking it. If the image's window doesn't have a toolbar, reveal it by clicking the little rectangle in the window's upper-right corner. Just drag your new application onto the destination icon in the toolbar, and your installation is complete.

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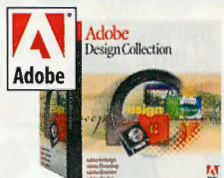
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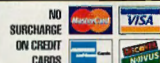


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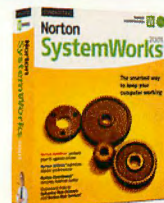
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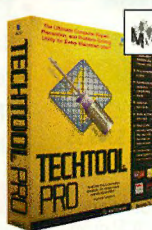


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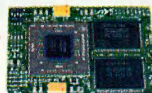
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CD-ROM	YES
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USB Ports	2
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MHz	500
RAM	64MB
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TOTAL RAM	192MB
Hard Drive	20GB
CD-RW	YES
56K Modem	YES
USB/FireWire Ports	2
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MHz	600
RAM	128MB
FREE RAM	128MB
TOTAL RAM	256MB
Hard Drive	40GB
CD-RW	YES
56K Modem	YES
USB/FireWire Ports	2
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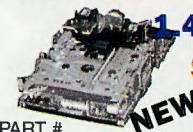
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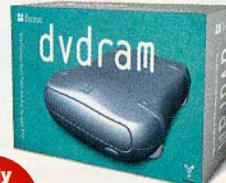
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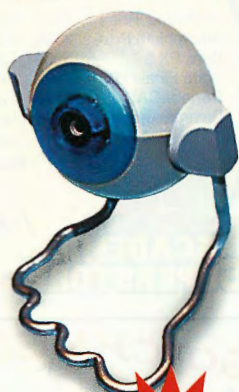


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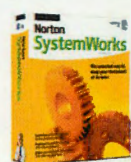
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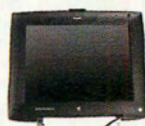
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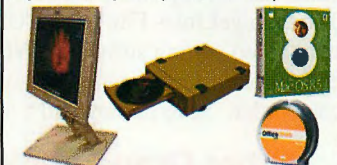
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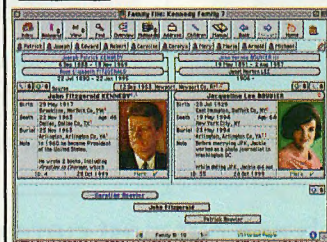
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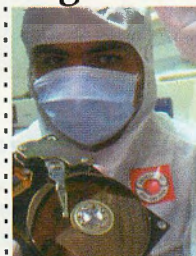
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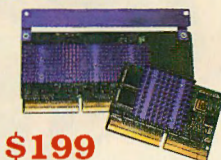


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NEWS BRIEFS

- Parents seek guidance counselors when children insist on saying X instead of 10 while counting. (page 3)
- Hackers break into television networks and reverse X and 10. Now you can watch *The 10 Files* on Fo10, followed by *The News at X*. (page 5)
- Users who set their Mac OS X system to the Graphite theme report losing the urge to lick their Macs. (page 6)
- Male G3 owners seek therapy, claiming that Mac OS X makes their equipment feel inadequate. (page 8)
- Aqua gets Kai Krauss's approval: "With the new technology, I can totally ignore Apple's all-new interface and invent my own instead." (page 9)
- Users petition for a Blue-and-White G4 tower to match their Aqua desktop. (page 10)
- Microsoft laughs at OS X's Aqua Icons screen saver, saying, "The Windows Icons screen saver flies much faster." (page 11)
- Shareware authors band together to make OS X more like OS 9: "We miss Type 2 errors." (page 13)

IN STYLE

Avoiding Fashion Faux Pas

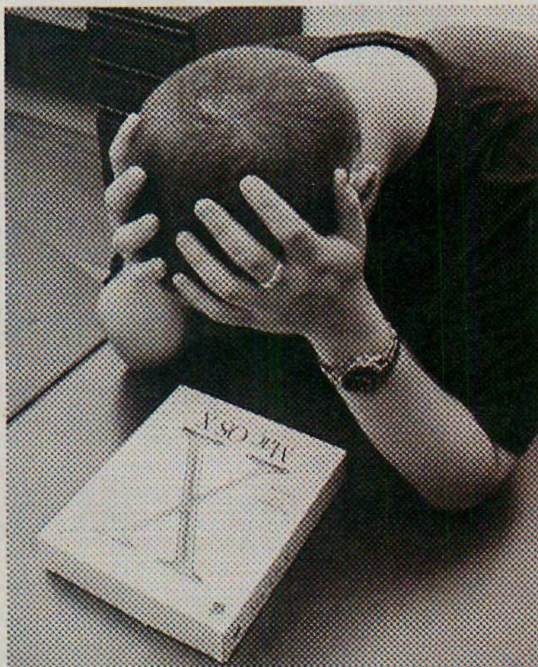
When Yves Saint Laurent debuted the mantra "Fashion fades, style is eternal," surely he had in mind those iMac amateurs who jumped headfirst into tacky color palettes without even thinking of the larger couture consequences. Now they're predictably installing Aqua on their Tangerine iMacs, which is the equivalent of wrapping a blue diamond in fruit roll. (See section B12 for tips on avoiding a fashion retraction.)

Mac OS X Incites Psychological Brouhaha

GENEVA, SWITZERLAND—The World Health Organization issued a warning today that the worldwide release of Mac OS X has unleashed a range of new psychological and physiological traumas upon the world population. About 100 doctors joined forces at WHO's headquarters in Geneva to find emergency treatments for insidious disorders. Illnesses such as Kernel Panic and Internet Insecurity are reportedly infecting the wired world like wildfire.

"We find the Mac OS X installation process passive-aggressive, emotionally abusive, and highly manipulative," said internationally renowned psychiatrist Lillith Crane. She singled out the No, I Am Not Ready For The Internet radio button as particularly dangerous, saying, "It lulls users into thinking the installer is a friend while it stabs them in the back with subtle condescension."

Hospitals around the world are reporting increased incidents of such
(continued on page 8)



Crime Boss Gives X New Meaning

Lack of Drivers Stymies Forging Industry

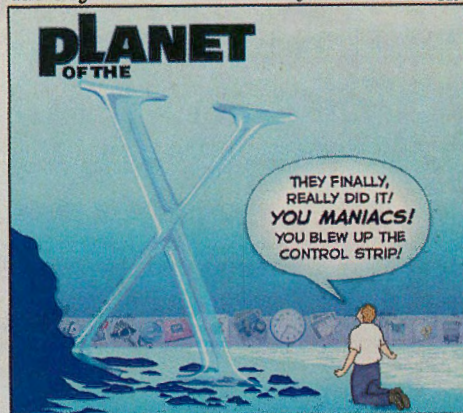
CHICAGO, IL—The leader of the notorious MacFamiglia crime syndicate is calling for Steve Jobs's head after the Apple cofounder and CEO failed to ship Mac OS X support for the printers used by the MacFamiglia money-counterfeiting ring.

"What Mr. Jobs failed to realize is that some of his most devout and loyal customers—namely, us—rely on Macs to make their monies. The OS X situation is severely impacting our cash production," said MacFamiglia's Don Eduardo "Fat Eddie" Dinero. He went on to say that while he has great respect for Steve Jobs and Apple, if a printer-enabling patch isn't released soon, Jobs will be "sleepin' wit da fishes."

Apple and Steve Jobs declined to comment.
(continued on page 19)

The Joy of Tech

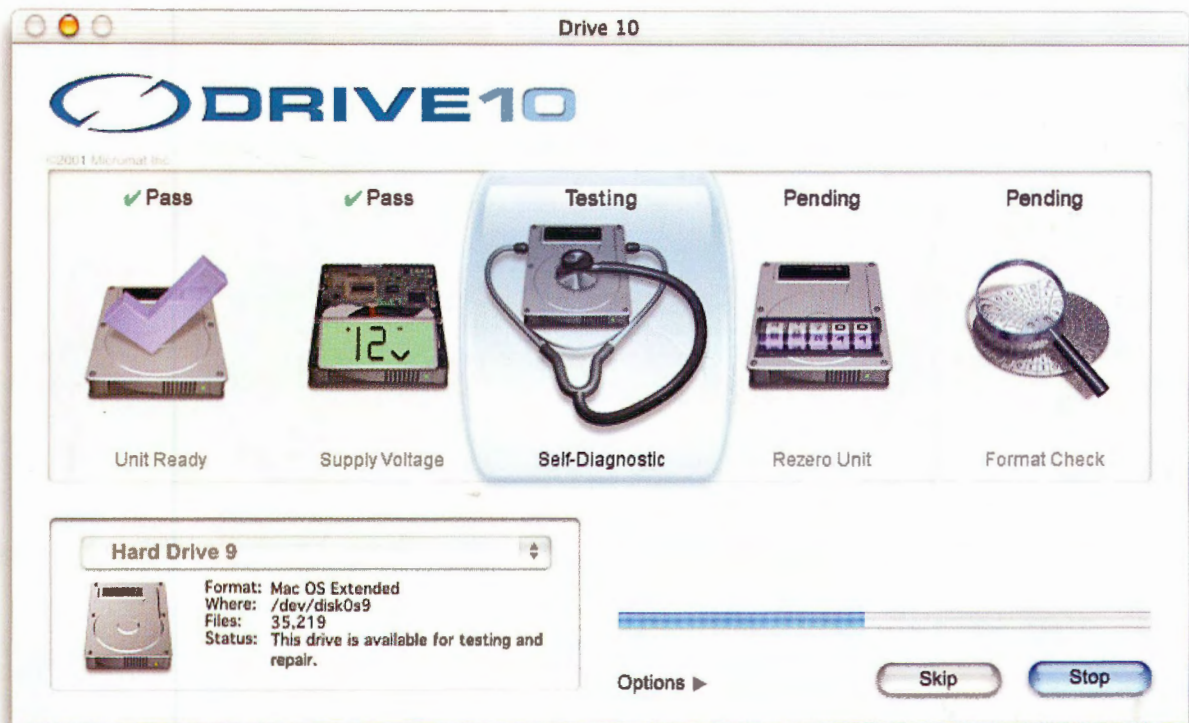
by Nitrozac & Snaggy



After living his whole life with the classic Macintosh, poor Charlie now found himself trapped in a strange new OS.

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